

=> D HIS

(FILE 'HOME' ENTERED AT 13:29:25 ON 03 APR 2000)

FILE 'REGISTRY' ENTERED AT 13:29:35 ON 03 APR 2000

ACT BEB059/A

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L1          SCR 2005 AND 1136
L2          STR
L3          5 SEA FILE=REGISTRY SSS SAM L1 AND L2
L4          135 S L1 AND L2 FULL    135 cpds
L5          STR L2
L6          STR L2

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FILE 'LREGISTRY' ENTERED AT 13:34:01 ON 03 APR 2000

L7 1 S PORPHYRIN/CN

FILE 'REGISTRY' ENTERED AT 13:34:53 ON 03 APR 2000

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L8 14213 S 9715.3.27/RID ← ring identifier for porphyrin
L9 116 S L4 NOT L8 ← subtracting cpds w/ porphyrin ring
L10 19 S L4 NOT L9
L11 107 S L9 AND 46.150.18/RID ← cpd must have [e]

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FILE 'HCAPLUS' ENTERED AT 13:40:30 ON 03 APR 2000

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L12 1 S WO9948491/PN
      SELECT RN L12 1 > apple work

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FILE 'REGISTRY' ENTERED AT 13:41:20 ON 03 APR 2000

L13 248 S E1-248 cpds in apple work

FILE 'HCAPLUS' ENTERED AT 13:41:57 ON 03 APR 2000

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L14 1 S L13 AND L12
L15 30 S L11
L16 29 S L15 NOT L14 29 cites after subtracting out Apple work

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FILE 'CAOLD' ENTERED AT 13:47:57 ON 03 APR 2000

L17 4 S L11 4 cites

FILE 'BEILSTEIN' ENTERED AT 13:49:28 ON 03 APR 2000

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L18 6 S L11 FULL
L19 43 S L2 FULL
L20 37 S L19 NOT L18
L21 31 S L20 AND PRE/FA 31 cites total (some are duplicated
L22 55 S SUZUKI, K?/AU AND TATSUOKA, T?/AU AND ISHIHARA, T?/AU AND OG
L23 55 S L22 AND PY=1997
L24 29 S L20 NOT L23
L25 45 S SUZUKI, K?/AU AND TATSUOKA, T?/AU AND MURAKAMI, T?/AU AND ISH
L26 23 S L24 AND PRE/FA
L27 20 S L26 NOT L25
L28 20 S L27 AND PRE/FA
L29 71 S MORI, A?/AU AND GOTO, Y?/AU AND TAKESHITA, H?/AU
L30 36 S L29 AND PY=1987
L31 19 S L28 NOT L30
L32 19 S L31 AND PRE/FA
L33 267 S CITTERIO, A?/AU AND PY=1980
L34 16 S L32 NOT L33
L35 16 S L34 AND PRE/FA
L36 28 S ALBINI, A?/AU AND SPRETI, S?/AU AND PY=1986
L37 15 S L35 NOT L36
L38 15 S L37 AND PRE/FA
L39 142 S NAGATA, T?/AU AND PY=1991
L40 7 S L38 NOT L39
L41 7 S L40 AND PRE/FA
L42 41 S LINDSEY, ?/AU AND PY=1962
L43 5 S L41 NOT L42
L44 5 S L43 AND PRE/FA
L45 5 S L44 NOT L42
L46 0 S RUEGHEIMER, H?/AU AND PY=1896

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this is another way to subtract out duplicated references in Beilstein

SEARCHED BY SUSAN HANLEY 305-4053

Page 1

↑
the highlighted L#'s show the 1st hit str for a reference

JAYARAM 09/424,059

L47	233 S RUEGHEIMER?/AU
L48	29 S L47 AND PY=1896
L49	4 S L45 NOT L48
L50	4 S L49 AND PRE/FA
L51	131 S LINDSEY?/AU AND PY=1962
L52	3 S L50 NOT L51

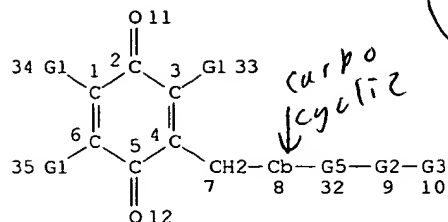
opd has
at least 2 oxygens

JAYARAM 09/424,059

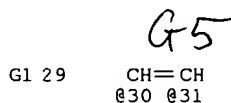
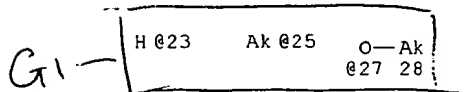
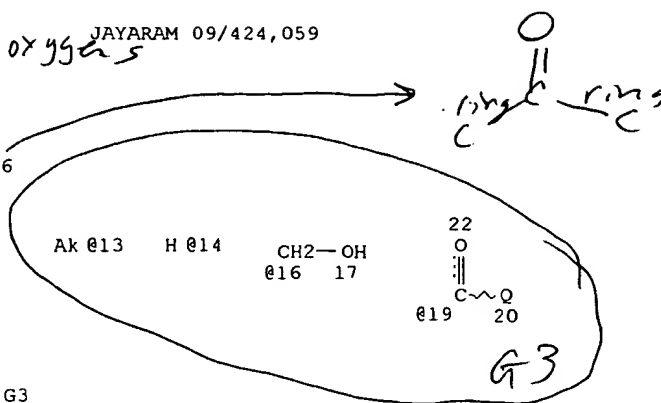
=> D QUE L11

L1
L2

SCR 2005 AND 1136
STR



carpo
cyclic



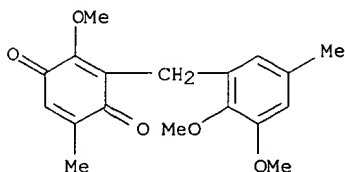
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VAR G3=13/14/16/19
REP G5=(0-1) 30-8 31-9
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CONNECT IS E3 RC AT 2
CONNECT IS E3 RC AT 4
CONNECT IS E3 RC AT 5
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 12
CONNECT IS E1 RC AT 13
CONNECT IS E1 RC AT 25
CONNECT IS E1 RC AT 28
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 8
GGCAT IS LOC AT 13
GGCAT IS LOC AT 25
GGCAT IS LOC AT 28
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE
L4 135 SEA FILE=REGISTRY SSS FUL L1 AND L2
L8 14213 SEA FILE=REGISTRY 9715.3.27/RID
L9 116 SEA FILE=REGISTRY L4 NOT L8
L11 107 SEA FILE=REGISTRY L9 AND 46.150.18/RID

=> D BIB ABS HITSTR L16 1-29

L16 ANSWER 1 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1999:581371 HCAPLUS
 DN 132:1354
 TI Biomimetic degradation of lignin and lignin model compounds by synthetic anionic and cationic water soluble manganese and iron porphyrins
 AU Crestini, C.; Saladino, R.; Tagliatesta, P.; Boschi, T.
 CS Dipartimento di Scienze e Tecnologie Chimiche, Universita di Tor Vergata, Rome, 00133, Italy
 SO Bioorg. Med. Chem. (1999), 7(9), 1897-1905
 CODEN: BMECEP; ISSN: 0968-0896
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB The biomimetic oxidn. of 5-5' condensed and diphenylmethane lignin model compds. with several water sol. anionic and cationic iron and manganese porphyrins in the presence of hydrogen peroxide is reported. The oxidative efficiency of manganese and iron meso-tetra(2,6-dichloro-3-sulfonatophenyl) porphyrin chloride (TDCSPPMnCl and TDCSPPFeCl, resp.), meso-tetra-3-sulfonatophenyl porphyrin chloride (TSPPMnCl) and manganese meso-tetra(N-methylpyridinio)porphyrin pentaacetate (TPyMePMn(CH₃COO)₅) was compared on the basis of the oxidn. extent of the models tested. Manganese porphyrins were found more effective in degrading lignin substructures than iron ones. Among them the cationic TPyMePMn(CH₃COO)₅, never used before in lignin oxidn., showed to be the best catalyst. The catalytic activity of porphyrins in hydrogen peroxide oxidn. of residual kraft lignin was also investigated. The use of quant. ³¹P NMR allowed the focusing on the occurrence of different degradative pathways depending on the catalyst used. TPyMePMn(CH₃COO)₅ was able to perform the most extensive degrdn. of the lignin structure, as demonstrated by the decrease of aliph. hydroxyl groups and carboxylic acids. Noteworthy, no significant condensation reactions occurred during manganese porphyrins catalyzed oxidns. of residual kraft lignin, while in the presence of iron porphyrins a substantial increase of condensed substructures was detected.
 IT 215875-59-5
 RL: MFM (Metabolic formation); PRP (Properties); BIOL (Biological study); FORM (Formation, nonpreparative)
 (biomimetic degrdn. of lignin and lignin model compds. by synthetic anionic and cationic water sol. manganese and iron porphyrins)
 RN 215875-59-5 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 3-[(2,3-dimethoxy-5-methylphenyl)methyl]-2-methoxy-5-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1999:235537 HCAPLUS
 DN 131:25641
 TI Electron transfer in porphyrin multimolecular self-organized nanostructures
 AU Zenkevich, Eduard I.; Bachilo, Sergei M.; Shulga, Alexander M.; Rempel, Ulrich; Willert, Andreas; Von Borczyskowski, Christian
 CS Institute of Molecular and Atomic Physics, Acad. Sci. of Belarus, Minsk, 220072, Belarus
 SO Mol. Cryst. Liq. Cryst. Sci. Technol., Sect. A (1998), 324, 169-176
 CODEN: MCLCE9; ISSN: 1058-725X
 PB Gordon & Breach Science Publishers
 DT Journal

SEARCHED BY SUSAN HANLEY 305-4053

Page 1

LA English

AB On the base of covalent and noncovalent bonds nanoscale self-assembling multiporphyrin arrays with well-defined geometry, the controllable no. of interacting components and their spectral and photophys. properties were formed. Deactivation of excited singlet and triplet states was studied of multicomponent systems of Zn-octaethylporphyrin dimer with a Ph spacer covalently linked to various electron acceptors (benzoquinone or pyromellitimide) and/or self-assembled with tetrapyrrolic extra-ligands. The competition between the nonradiative energy transfer (within .ltoreq.10 ps) and charge transfer (within 300 fs - 700 ps) processes in the systems depends on the structure, spectral and redox properties of interacting subunits and may be driven by the distance, temp. and solvent polarity. The possible pathways and mechanisms of the electron transfer in the systems of various types are discussed (Marcus theory for the normal region and the nonadiabatic case, the superexchange mechanism).

IT 206270-68-0 206270-69-1

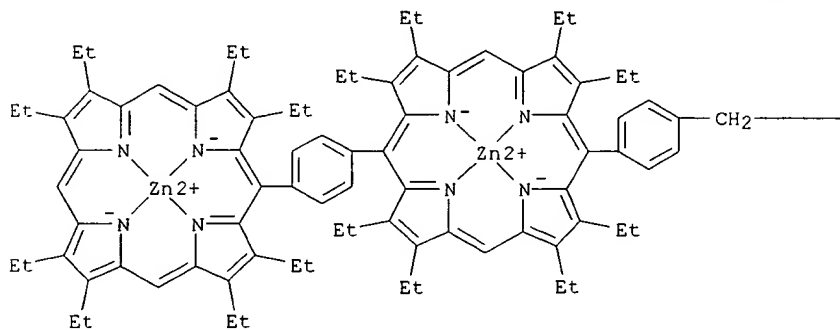
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(photoinduced electron transfer and fluorescence quenching in self-assembling multiporphyrin arrays)

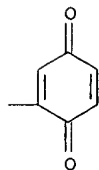
RN 206270-68-0 HCAPLUS

CN Zinc, [.mu.-[2-[[4-[2,3,7,8,12,13,17,18-octaethyl-15-[4-(2,3,7,8,12,13,17,18-octaethyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(4-)]di- (9CI) (CA INDEX NAME)

PAGE 1-A

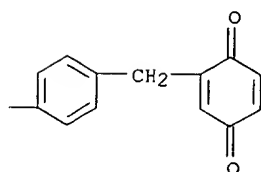
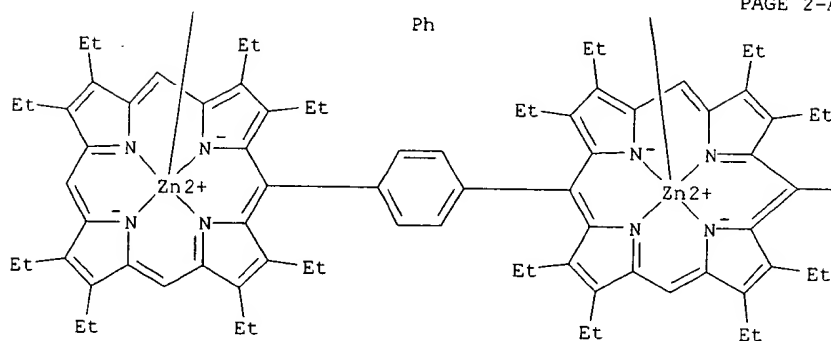
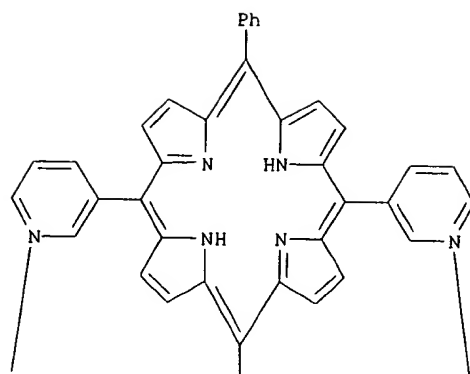


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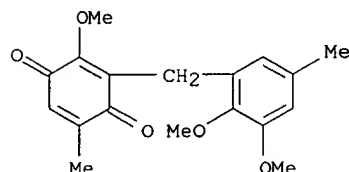
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CN Zinc, [.mu.-[5,15-diphenyl-10,20-di(3-pyridinyl-.kappa.N)-21H,23H-porphine]] [.mu.-[2-[[4-[2,3,7,8,12,13,17,18-octaethyl-15-[4-(2,3,7,8,12,13,17,18-octaethyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(4-)]di- (9CI) (CA INDEX NAME)



L16 ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1998:653250 HCAPLUS
 DN 130:15031
 TI Oxidative degradation of kraft lignin model compounds by anionic and cationic porphyrins
 AU Crestini, Claudia; Saladino, Raffaele; Giovannozzi-Sermanni, Giovanni;
 SEARCHED BY SUSAN HANLEY 305-4053

- Tagliatesta, Pietro; Boschi, Tristano
 CS Agrobiology and Agrochemistry Department, University of Tuscia, Viterbo, 01100, Italy
 SO Adv. Lignocellul. Chem. Ecol. Friendly Pulping Bleaching Technol., Eur. Workshop Lignocellul. Pulp, 5th (1998), 277-280 Publisher: University of Aveiro, Aveiro, Port.
 CODEN: 66TZAG
 DT Conference
 LA English
 AB The biomimetic oxidn. of 5-5' condensed and diphenylmethane lignin model compds. with several water sol. anionic and cationic iron and manganese porphyrins in the presence of hydrogen peroxide is reported. The oxidative efficiency of manganese and iron meso-tetra(2,6-dichloro-3-sulfonatophenyl)porphyrin chlorides (TDCSPPMnCl and TDCSPPFeCl), manganese meso-tetra(3-sulfonatophenyl)porphyrin chlorides, (TSPPMnCl), meso-tetra(N-methylpyridinio)porphyrin manganese pentaacetate (TPyMePMnAc5) were compared on the basis of the oxidn. extent of the models tested. Anionic and cationic water sol. manganese porphyrins were found more effective in degrading kraft lignin and lignin substructures than iron porphyrins. Among Mn porphyrins the cationic TPyMePMnAc5, never used before in lignin oxidn., showed to be the most efficient catalyst.
 IT 215875-59-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (oxidative degrdn. of kraft lignin model compds. by anionic and cationic porphyrins)
 RN 215875-59-5 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 3-[(2,3-dimethoxy-5-methylphenyl)methyl]-2-methoxy-5-methyl- (9CI) (CA INDEX NAME)

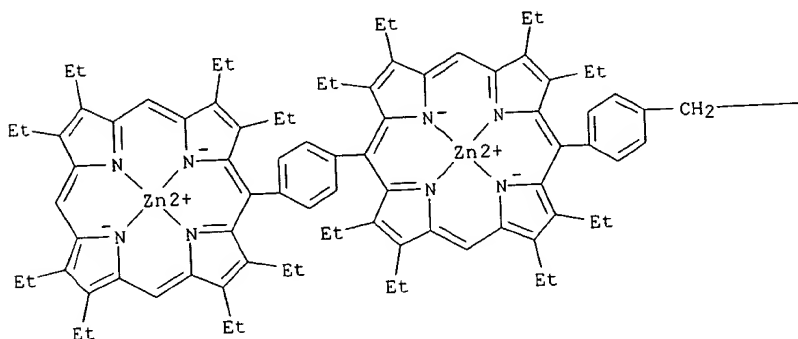


- L16 ANSWER 4 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1998:194003 HCAPLUS
 DN 128:301466
 TI Energy and charge transfer dynamics in self-organized multimolecular arrays
 AU Zenkevich, E. I.; Shulga, A. M.; Bachilo, S. M.; Rempel, U.; von Richthofen, J.; von Borczyskowski, Ch.
 CS Institute of Molecular and Atomic Physics, Belarus Academy of Sciences, Minsk, 220072, Belarus
 SO J. Lumin. (1998), 76&77, 354-358
 CODEN: JLUMA8; ISSN: 0022-2313
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB The main kinetic parameters of the nonradiative singlet-singlet energy transfer and the charge sepn. were studied for well-defined supramol. arrays with controllable no. and photophys. properties of subunits in methylcyclohexane at 77-300 K (cw, picosecond time-resolved fluorescence spectroscopy and femtosecond pump-probe kinetic data). The arrays formation is based on covalently linked Zn-porphyrin dimers with or without electron acceptors (quinone, anthraquinone, pyromellitimide) and the noncovalent self-assembling with pyridyl substituted tetrapyrrolic extra-ligands (porphyrins, chlorins and tetrahydroporphyrins, fluorinated tetraphenylporphyrins). The competition between the energy transfer (within .ltoreq.10 ps) and charge transfer (within 300 fs-700 ps) processes in the systems under consideration depends on the structure, spectral and redox properties of interacting subunits and may be driven by the distance, temp. and solvent polarity. The possible mechanisms of the excited S-states quenching in the complexes (including 'superexchange'

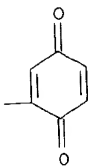
SEARCHED BY SUSAN HANLEY 305-4053

model) are discussed.
 IT 206270-68-0 206270-69-1
 RL: OCU (Occurrence, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); OCCU (Occurrence); PROC (Process)
 (energy and charge transfer dynamics in self-organized multimol. arrays)
 RN 206270-68-0 HCAPLUS
 CN Zinc, [.mu.-[2-[[4-(2,3,7,8,12,13,17,18-octaethyl-15-[4-(2,3,7,8,12,13,17,18-octaethyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(4-)]di- (9CI) (CA INDEX NAME)

PAGE 1-A

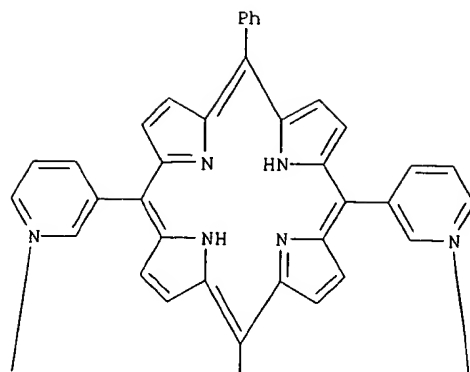


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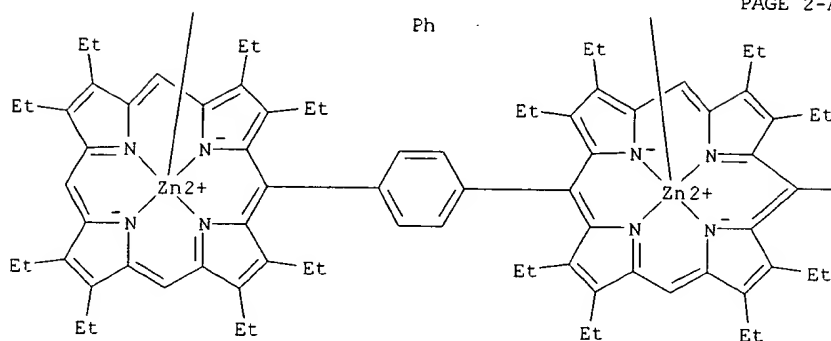


RN 206270-69-1 HCAPLUS
 CN Zinc, [.mu.-[5,15-diphenyl-10,20-di(3-pyridinyl-.kappa.N)-21H,23H-porphine)][.mu.-[2-[[4-(2,3,7,8,12,13,17,18-octaethyl-15-[4-(2,3,7,8,12,13,17,18-octaethyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(4-)]di- (9CI) (CA INDEX NAME)

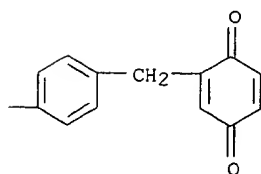
PAGE 1-A



PAGE 2-A

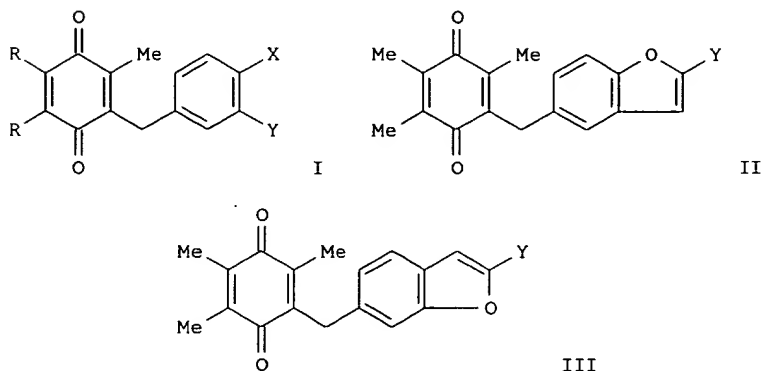


PAGE 2-B



L16 ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1997:271236 HCAPLUS
 DN 127:4973
 TI 2-Arylmethyl-1,4-benzoquinones. II. Novel inhibitors of platelet
 aggregation: synthesis and pharmacological evaluation
 AU Suzuki, Kenji; Tatsuoka, Toshio; Ishihara, Takafumi; Ogino, Ryoko;
 SEARCHED BY SUSAN HANLEY 305-4053

Miyazaki, Tomoko; Satoh, Fumio; Miyano, Seiji; Sumoto, Kunihiro
 CS Suntory Inst. Biomedical Res., Osaka, 618, Japan
 SO Chem. Pharm. Bull. (1997), 45(4), 668-674
 CODEN: CPBTAL; ISSN: 0009-2363
 PB Pharmaceutical Society of Japan
 DT Journal
 LA English
 GI



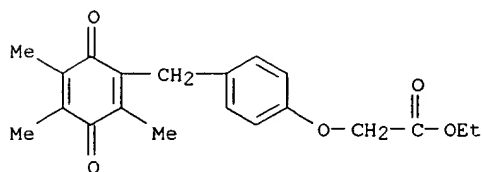
AB Two new series of 2-arylmethyl-1,4-benzoquinones I (R = Me, X = OCH₂CO₂H, OCH₂CO₂Et, OCH₂COR₁, Y = H, OCH₂CO₂H, OCH₂CO₂Et, OCH₂COR₁, R₁ = morpholino; R = OMe, X = OCH₂CO₂H, OCH₂CO₂Et, H, Y = H, OCH₂CO₂H, OCH₂CO₂Et, R₁ = morpholino), II (Y = CO₂Et, CONMe₂, COR₁, R₁ = morpholino, thiazino), and III (Y = CO₂Et, COR₁, R₁ = morpholino) were synthesized for evaluation of their pharmacol. activities. These compds. showed significant inhibition of platelet aggregation and some of them possessed a protective effect against endothelial cell injury. Structure-activity relationship studies indicated that I (R = Me, X = OCH₂CO₂Et, Y = H; R = Me, X = H, Y = OCH₂CO₂H) and II (Y = COR₁, R₁ = morpholino) (IV) are potent inhibitors of platelet aggregation induced by arachidonic acid (AA) with an IC₅₀ in the range of 1-10 μ g/mL. Among them, IV showed a significant inhibitory activity against endothelial cell injury caused by hydrogen peroxide (H₂O₂) at 1 μ M.

IT 146476-02-0P 146476-03-1P 146476-05-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (prepn. and platelet aggregation inhibitory activity of
 (arylmethyl)benzoquinones)

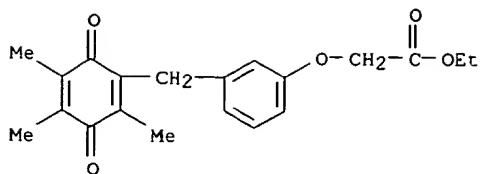
RN 146476-02-0 HCAPLUS

CN Acetic acid, {4-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy}-, ethyl ester (9CI) (CA INDEX NAME)



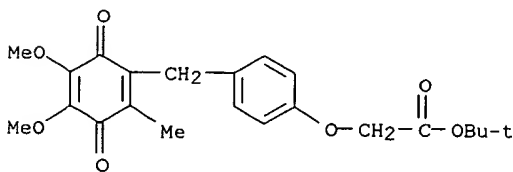
RN 146476-03-1 HCAPLUS

CN Acetic acid, [3-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 146476-05-3 HCAPLUS

CN Acetic acid, [4-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

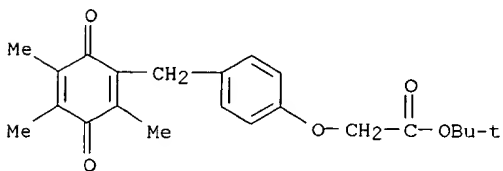


IT 146475-92-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and platelet aggregation inhibitory activity of
(arylmethyl)benzoquinones)

RN 146475-92-5 HCAPLUS

CN Acetic acid, [4-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

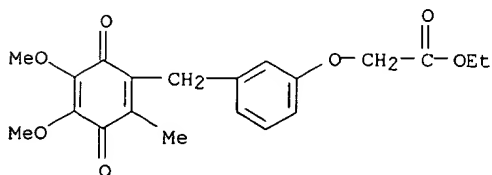


IT 146476-08-6P 146476-09-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and platelet aggregation inhibitory activity of
(arylmethyl)benzoquinones)

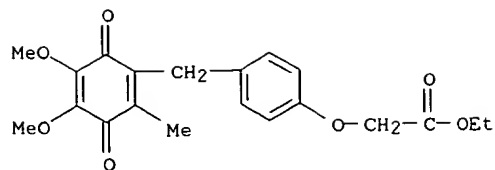
RN 146476-08-6 HCAPLUS

CN Acetic acid, [3-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



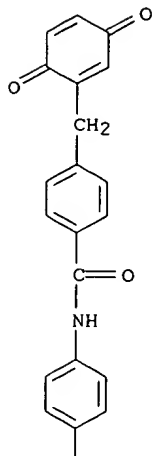
RN 146476-09-7 HCAPLUS

CN Acetic acid, [4-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

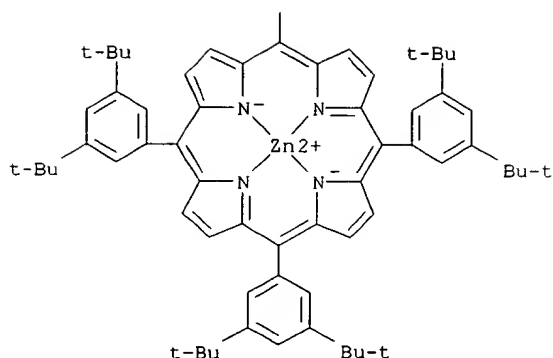


L16 ANSWER 6 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1996:726795 HCAPLUS
 DN 126:124603
 TI The small reorganization energy of C60 in electron transfer
 AU Imahori, Hiroshi; Hagiwara, Kiyoshi; Akiyama, Tsuyoshi; Aoki, Masanori; Taniguchi, Seiji; Okada, Tadashi; Shirakawa, Masahiro; Sakata, Yoshiteru
 CS The Institute of Scientific and Industrial Research, Osaka University, Mihoga-oka, Ibaraki, Osaka, 567, Japan
 SO Chem. Phys. Lett. (1996), 263(3,4), 545-550
 CODEN: CHPLBC; ISSN: 0009-2614
 PB Elsevier
 DT Journal
 LA English
 AB Porphyrin-linked fullerene 1 and porphyrin-linked quinone 2 have been designed and synthesized to evaluate the size and shape effect of fullerene in electron transfer. For evaluation of such an effect C60 and benzoquinone with comparable redn. potentials have been chosen and linked with a porphyrin, where a relatively rigid spacer ensures similar sepn. distance and nature of the intervening bonds between the redox pair. Accelerated charge sepn. and decelerated charge recombination were obsd. in 1 compared with 2 by picosecond fluorescence lifetime measurements and time-resolved transient absorption spectroscopy. They may be explained by the smaller reorganization energy in C60 compared with those in small acceptors.
 IT **182575-59-3**
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (small reorganization energy of C60 in photoinduced electron transfer of porphyrin-linked fullerene and porphyrin-linked quinone)
 RN 182575-59-3 HCAPLUS
 CN Zinc, [4-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-N-[4-[10,15,20-tris[3,5-bis(1,1-dimethylethyl)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl]benzamidato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L16 ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1996:570720 HCAPLUS
 DN 125:291542
 TI Synthesis and photophysical properties of porphyrin-linked C60 dyads
 AU Imahori, Hiroshi; Aoki, Masanori; Akiyama, Tsuyoshi; Sakata, Yoshiteru;
 Hagiwara, Kiyoshi; Okada, Tadashi
 CS Inst. Scientific Indus. Res., Osaka Univ., Osaka, 567, Japan
 SO Proc. - Electrochem. Soc. (1996), 96-10(Recent Advances in the Chemistry
 and Physics of Fullerenes and Related Materials, Vol. 3), 332-341
 CODEN: PESODO; ISSN: 0161-6374
 DT Journal
 LA English
 AB C60 was covalently linked to the mesophenyl ring of zinc
 tetraarylporphyrin at para, meta, and ortho positions with amido groups to
 elucidate intramol. photophys. properties of porphyrin-C60 linked systems.
 Irresp. of the linking mode between the two chromophores, photoinduced
 charge sepn. (CS) and subsequent charge recombination (CR) were obsd. in
 zincporphyrin-C60 dyads by picosecond fluorescence lifetime measurements
 and time-resolved transient absorption spectroscopy. Zincporphyrin-linked
 quinone also was designed and synthesized to evaluate the size effect of

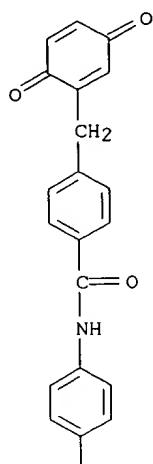
SEARCHED BY SUSAN HANLEY 305-4053

fullerene in electron transfer (ET). Accelerated CS and decelerated CR were obsd. in zincporphyrin-C60 dyads compared with the corresponding porphyrin-linked quinone. The result is explained by the smaller reorganization energy in C60 compared with that in benzoquinone.

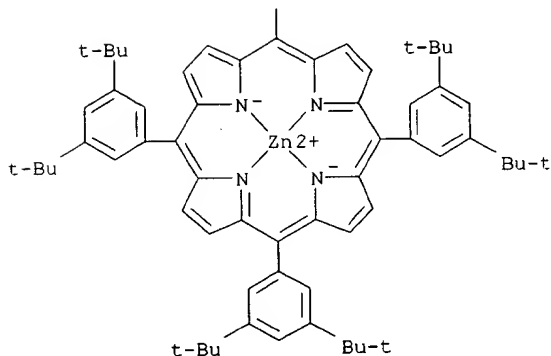
IT 182575-59-3
 RL: PRP (Properties)
 (free energy and kinetics of electron transfer)

RN 182575-59-3 HCAPLUS
 CN Zinc, [4-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-N-(4-[10,15,20-tris[3,5-bis(1,1-dimethylethyl)phenyl]-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24]phenyl]benzamidato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

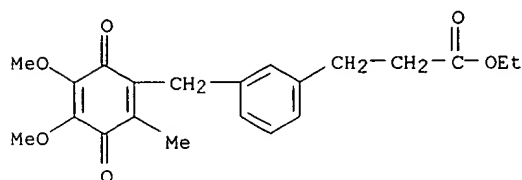


PAGE 2-A

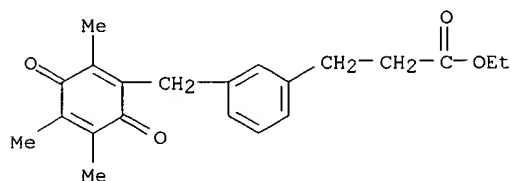


L16 ANSWER 8 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1996:80389 HCAPLUS
 DN 124:231983
 TI 2-Arylmethyl-1,4-benzoquinones. I. Novel inhibitors of platelet aggregation: synthesis and pharmacological evaluation
 AU Suzuki, Kenji; Tatsuo, Toshio; Murakami, Tomiko; Ishihara, Takafumi; Aisaka, Kazuo; Inoue, Teruyoshi; Ogino, Ryoko; Kuroki, Manami; Miyazaki, SEARCHED BY SUSAN HANLEY 305-4053

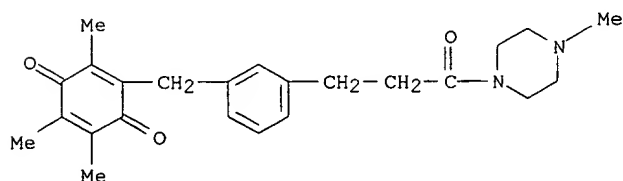
Tomoko; et al.
 CS Suntory Inst. for Biomedical Research, Osaka, 618, Japan
 SO Chem. Pharm. Bull. (1996), 44(1), 139-44
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 AB A new series of 2-arylmethyl-1,4-benzoquinones was synthesized for evaluation of their pharmacol. activities. These compds. showed significant inhibition of platelet aggregation induced by arachidonic acid (AA) and some of them possessed a protective effect against endothelial cell injury caused by hydrogen peroxide.
 IT **114072-76-3P 174868-89-4P 174868-91-8P 174868-95-2P**
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of arylmethylbenzoquinone platelet aggregation inhibitors)
 RN 114072-76-3 HCAPLUS
 CN Benzenepropanoic acid, 3-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)



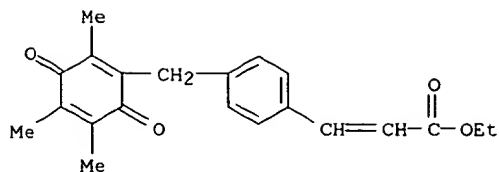
RN 174868-89-4 HCAPLUS
 CN Benzenepropanoic acid, 3-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 174868-91-8 HCAPLUS
 CN Piperazine, 1-methyl-4-[1-oxo-3-[3-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenyl]propyl]- (9CI) (CA INDEX NAME)

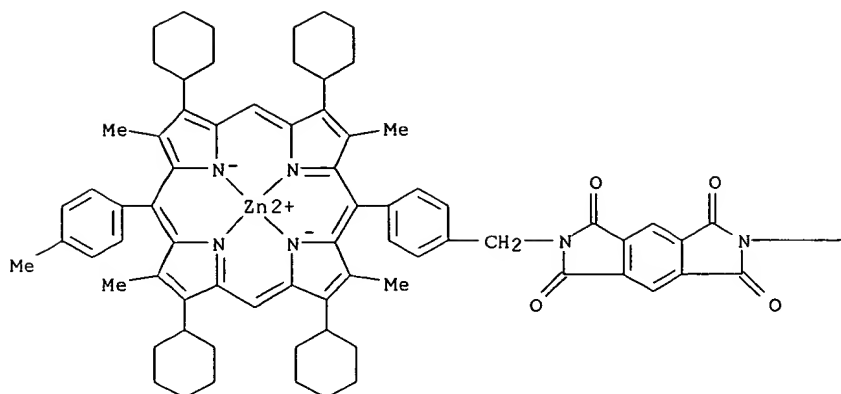


RN 174868-95-2 HCAPLUS
 CN 2-Propenoic acid, 3-[4-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

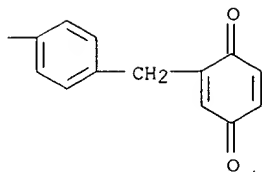


L16 ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1994:22414 HCAPLUS
 DN 120:22414
 TI Direct observation of a consecutive two-step electron transfer in some zinc porphyrin-pyromellitimide-quinone triads which undergo the same mode of electron transfers as in the bacterial photosynthetic reaction center
 AU Ohkohchi, Masaya; Takahashi, Akiko; Mataga, Noboru; Okada, Tadashi; Osuka, Atsuhiko; Yamada, Hiroko; Maruyama, Kazuhiro
 CS Fac. Eng. Sci., Osaka Univ., Toyonaka, 560, Japan
 SO J. Am. Chem. Soc. (1993), 115(25), 12137-43
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA English
 AB Intramol. photoinduced electron transfer in triads composed of Zn porphyrin (ZnP), pyromellitimide (Im), and quinone (Q) were studied by ps transient absorption spectroscopy to observe directly a 2-step electron transfer, the reaction mode of which is the same as that occurring in the biol. photosynthetic reaction center. Intramol. charge sepn. in 1(ZnP)*-Im-Q gives an initial ion pair (IP) state {(ZnP)+-(Im)--Q}, in which the charge shift reaction giving a secondary IP state {(ZnP)+-Im-(Q)-} occurs in competition with charge recombination deactivation to the ground state. This 2-step electron transfer was obsd. directly by monitoring the rise and decay kinetics of a characteristic sharp absorption band due to (Im)-: 1(ZnP)*-Im-Q .fwdarw. (ZnP)+-(Im)--Q .fwdarw. (ZnP)+-Im-(Q)+. Rates of the charge shift reaction can be controlled by changing the redn. potential of Q, and an .apprx.100% quantum yield for the formation of (ZnP)+-Im-(Q)- from 1(ZnP)*-Im-Q was realized in a triad bearing trichloro-1,4-benzoquinone as the 2nd electron acceptor owing to a faster charge shift reaction than charge recombination in the (ZnP)+-(Im)--Q state.
 IT 151892-30-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and NMR and transient absorption spectra and bacterial photosynthetic electron transfer reaction center modeling by)
 RN 151892-30-7 HCAPLUS
 CN Zinc, [2-[4-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenyl]-6-[[4-[2,8,12,18-tetracyclohexyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]methyl]benzo[1,2-c:4,5-c']dipyrrole-1,3,5,7(2H,6H)-tetronato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L16 ANSWER 10 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1993:495201 HCAPLUS

DN 119:95201

TI Intramolecular photoinduced charge separation and charge recombination of the product ion pair states of a series of fixed-distance dyads of porphyrins and quinones: energy gap and temperature dependences of the rate constants

AU Asahi, Tsuyoshi; Ohkohchi, Masaya; Matsusaka, Ryohzi; Mataga, Noboru; Zhang, Run Ping; Osuka, Atsuhiko; Maruyama, Kazuhiro

CS Fac. Eng. Sci., Osaka Univ., Toyonaka, 560, Japan

SO J. Am. Chem. Soc. (1993), 115(13), 5665-74

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB Intramol. photoinduced charge sepn. (CS) and charge recombination (CR) of the product ion pair (IP) state of a series of fixed-distance dyads consisting of free-base porphyrin or zinc porphyrin and quinones were investigated by means of picosecond-femtosecond laser spectroscopies in order to examine the energy gap and temp. dependence of CS and CR reactions in nonpolar media. Obtained CS rates were in the normal region, up to the neighborhood of the top region, and CR rates were in the inverted region; their energy gap dependences at room temp. were approx. reproduced by a semiclassical formula taking into consideration the high-frequency quantum mode of nuclear vibrations, although the CS rates

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near the top region did not show indication of the shift to the inverted region, contrary to the calcn. It was confirmed that the activation barrier for the CS reaction increases with a decrease of the energy gap, while the CR process is activationless, indicating the dominant effect of the high-frequency quantum mode in the inverted region. However, it was hard to find optimum parameter values for reorganization energies, etc., in the theor. equation which could reproduce quant. both the energy gap dependence and the temp. dependence of the CS and CR rates at the same time. The solvent polarity effect upon the energy gap ($-\Delta G_{CS}$) dependence of the CS rate const. (k_{CS}) was also examd. and showed a rather large systematic change corresponding to the increase of the solvent reorganization energy with the increase of the solvent polarity, while the energy gap (ΔG_{CR}) dependence of the CR rate const. (k_{CR}) showed little solvent polarity dependence, leading to the crossing between the k_{CS} vs $-\Delta G_{CS}$ curve in the normal to near the top region and the k_{CR} vs $-\Delta G_{CR}$ in the inverted to near the top region. Implications of these results, which seem difficult to interpret on the basis of the conventional electron-transfer theories, are discussed on the basis of the dominant effect of the quantum mech. tunneling in the inverted region and/or the existence of nonlinear or some specific interactions between the IP state and the surrounding polar solvent.

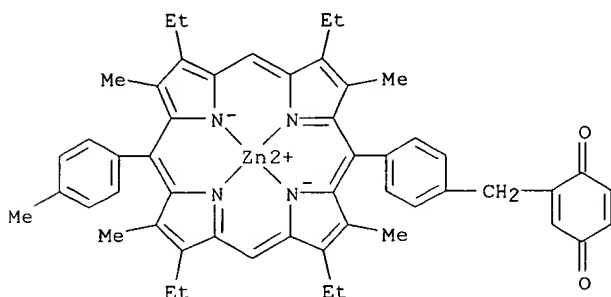
IT 136300-62-4 145847-08-1 145847-09-2

RL: PRP (Properties)

(intramol. photoinduced charge sepn. and charge recombination of the product ion pair states of, energy gap and temp. and solvent effects on)

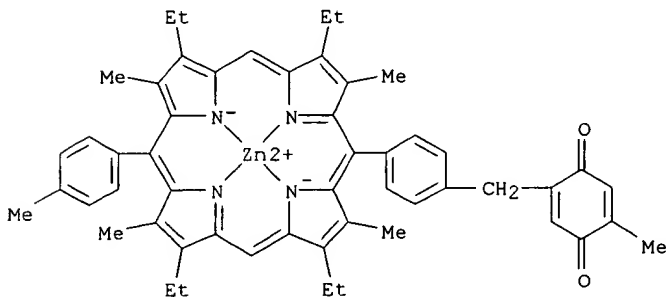
RN 136300-62-4 HCAPLUS

CN Zinc, [2-([4-([2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24)-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 145847-08-1 HCAPLUS

CN Zinc, [2-methyl-5-([4-([2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24)-, (SP-4-2)- (9CI) (CA INDEX NAME)

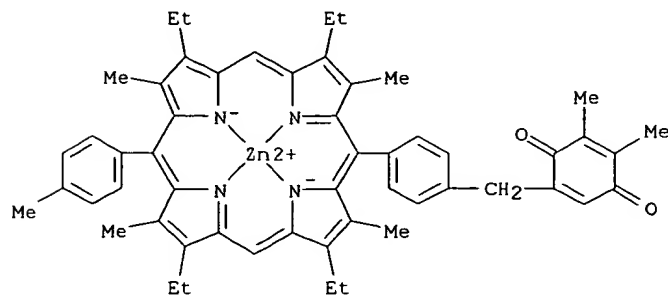


RN 145847-09-2 HCAPLUS

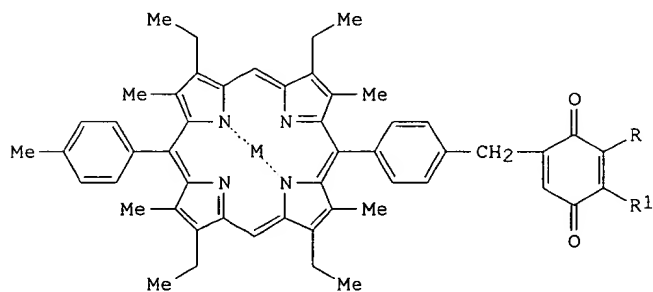
CN Zinc, [2,3-dimethyl-5-([4-([2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-

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(4-methylphenyl)-21H,23H-porphin-5-yl[phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)

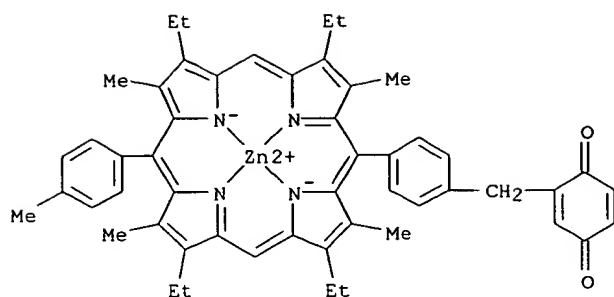


L16 ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1993:408569 HCAPLUS
 DN 119:8569
 TI Synthesis and intramolecular electron-transfer reaction of distance-fixed quinone-linked porphyrins
 AU Osuka, Atsuhiko; Zhang, Run Ping; Maruyama, Kazuhiro; Yamazaki, Iwao; Nishimura, Yoshinobu
 CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan
 SO Bull. Chem. Soc. Jpn. (1992), 65(10), 2807-13
 CODEN: BCSJA8; ISSN: 0009-2673
 DT Journal
 LA English
 GI



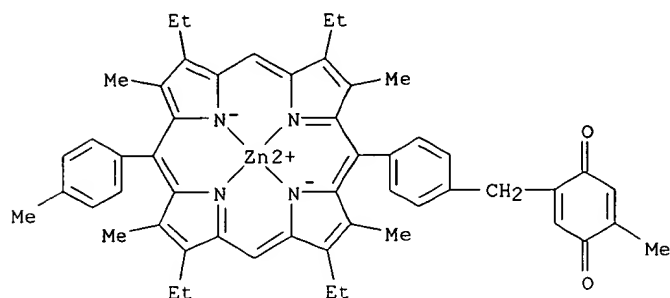
I

AB The synthesis of distance-fixed quinone-linked porphyrins I (R = H, Me; R1 = H, Me, Cl; RR1 = CH:CHCH:CH; M = Zn, 2H) in which electron affinity of the attached quinone is systematically changes is described. The fluorescence lifetimes of the porphyrin chromophore in these model compds. were shortened due to the intramol. electron transfer to the attached quinone. The rates of the charge sepn. between the singlet excited state of the porphyrin and the quinone were detd. on the basis of these shortened fluorescence lifetimes and were plotted against the free energy changes assocd. with the charge sepn. Up to ca. 1.54 eV exothermic reaction, the rates of the charge sepn. were found to still increase.
 IT 136300-62-4P 145847-08-1P 145847-09-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and intramol. electron transfer reaction of)
 RN 136300-62-4 HCAPLUS
 CN Zinc, [2-[[4-[[2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)



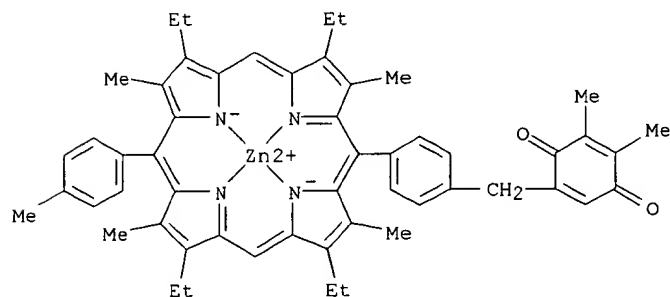
RN 145847-08-1 HCAPLUS

CN Zinc, [2-methyl-5-[[4-(2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 145847-09-2 HCAPLUS

CN Zinc, [2,3-dimethyl-5-[[4-(2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)



L16 ANSWER 12 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1993:147300 HCAPLUS

DN 118:147300

TI Preparation of phenoxyacetic acid derivatives for treatment of organic or functional disorders from ischemia

IN Tatsuoka, Toshio; Suzuki, Kenji

PA Suntory, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

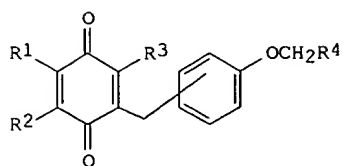
CODEN: JKXXAF

DT Patent

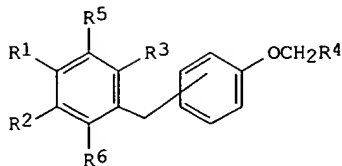
LA Japanese

FAN.CNT 1

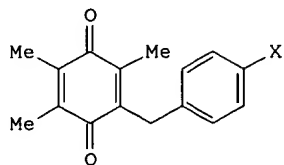
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04226937	A2	19920817	JP 1991-130100	19910601
PRAI	JP 1990-141676		19900601		
OS	MARPAT 118:147300				
GI					



I



II



III

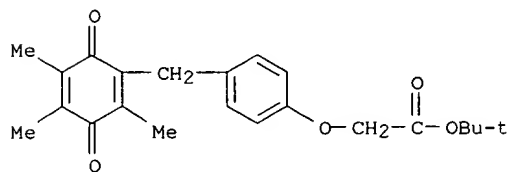
AB The title compds. (I and II; R1-R3 = C1-5 alkyl or alkoxy; R4 = CO₂H, its ester or amide; R5, R6 = OH, C1-5 alkoxy), inhibiting blood platelet aggregation, cell injury, and brain edema and useful for treating heart ischemia diseases such as angina pectoris, cardiac infarction, and heart failure and brain ischemic diseases such as brain edema and apoplexy sequelae, are prepd. Thus, acetylation of 4-(2,5-dimethoxy-3,4,6-trimethylphenyl)methylphenol ((prepn. given) with Ac₂O in pyridine in the presence of 4-dimethylaminopyridine and oxidn. of the product acetate with (NH₄)₂Ce(NO₃)₆ in aq. MeCN gave, after deacetylation with NaHCO₃ in aq. MeOH, 4-(3,5,6-trimethyl-1,4-benzoquinon-2-yl)methylphenol which was alkylated by BrCH₂CO₂CMe₃ in acetone contg. K₂CO₃ to give title compd. II (X = CH₂CO₂CMe₃). II (X = CH₂CO₂Et) showed IC₅₀ of 3.8 and 4.2 (concn. unit not given) for inhibiting collagen- and arachidonic acid-induced aggregation of rabbit blood platelets. A total of 19 I were prepd.

IT 146475-92-5P 146475-93-6P 146476-02-0P
146476-03-1P 146476-04-2P 146476-05-3P
146476-08-6P 146476-09-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for treatment of ischemic brain and heart disease)

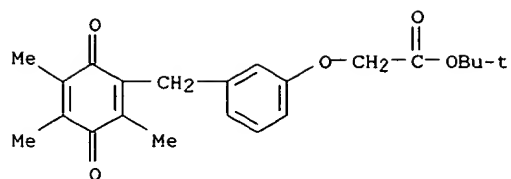
RN 146475-92-5 HCAPLUS

CN Acetic acid, [4-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



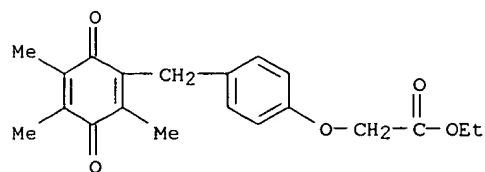
RN 146475-93-6 HCAPLUS

CN Acetic acid, [3-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



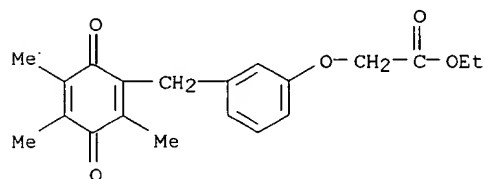
RN 146476-02-0 HCAPLUS

CN Acetic acid, [4-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



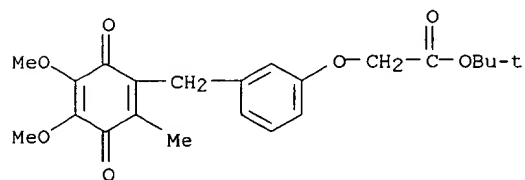
RN 146476-03-1 HCAPLUS

CN Acetic acid, [3-[(2,4,5-trimethyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



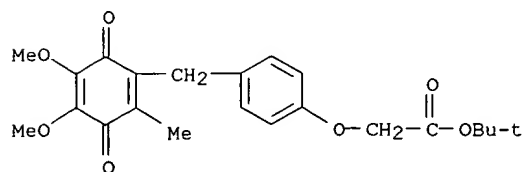
RN 146476-04-2 HCAPLUS

CN Acetic acid, [3-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



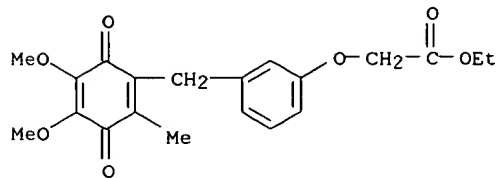
RN 146476-05-3 HCAPLUS

CN Acetic acid, [4-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



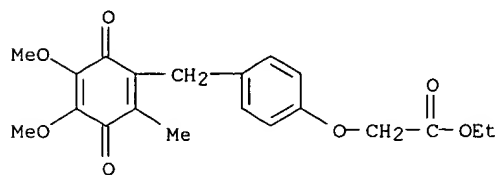
RN 146476-08-6 HCAPLUS

CN Acetic acid, [3-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 146476-09-7 HCAPLUS

CN Acetic acid, [4-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 13 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1992:59035 HCAPLUS

DN 116:59035

TI Synthesis and fluorescence properties of selectively metalated diporphyrins with electron-accepting moieties

AU Nagata, Toshi

CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan

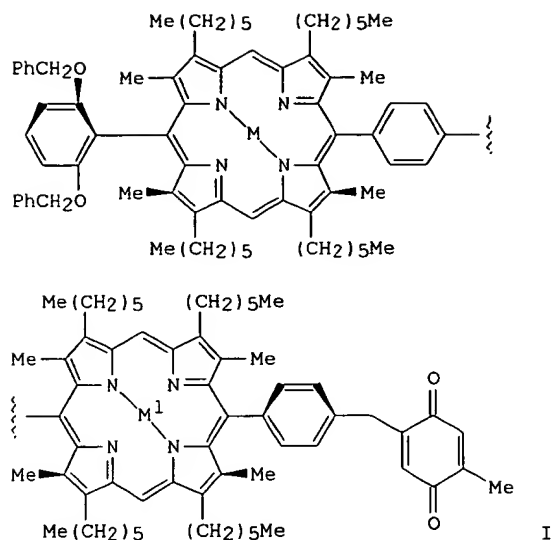
SO Bull. Chem. Soc. Jpn. (1991), 64(10), 3005-16

CODEN: BCSJA8; ISSN: 0009-2673

DT Journal

LA English

GI



AB Diporphyrins, e.g., I ($M = M1 = H2$) were prepd. and metalated to give a mixt. of mono- and dizinc complexes with preferential formation of monozinc porphyrins, e.g., I ($M = H2, M1 = Zn$) over I ($M = Zn, M1 = H2$). Steady-state fluorescence of the zinc complexes showed substantial quenching of the fluorescence of the free-base porphyrin. A possible super exchange mechanism of long-range electron transfer is discussed.

IT 138394-62-4P 138394-63-5P 138394-64-6P

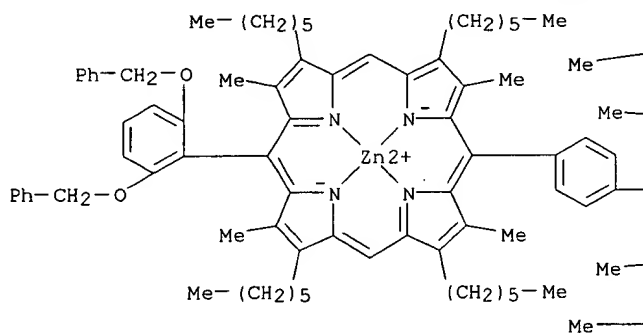
138394-65-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and fluorescence spectrum of)

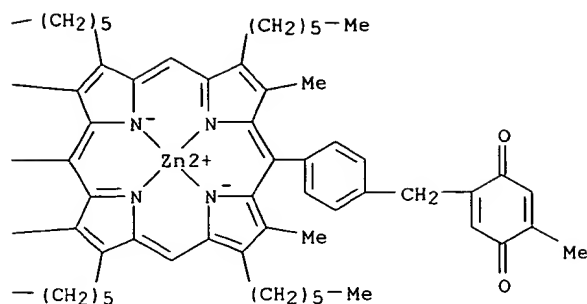
RN 138394-62-4 HCAPLUS

CN Zinc, [μ]-[2-[[4-[15-[4-[15-[2,6-bis(phenylmethoxy)phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-5-methyl-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24']]di- (9CI) (CA INDEX NAME)

PAGE 1-A



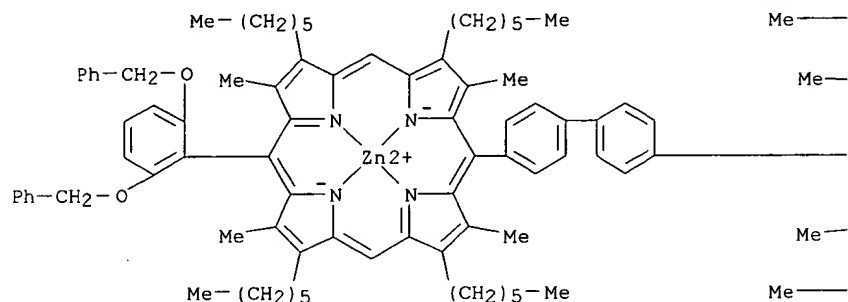
PAGE 1-B



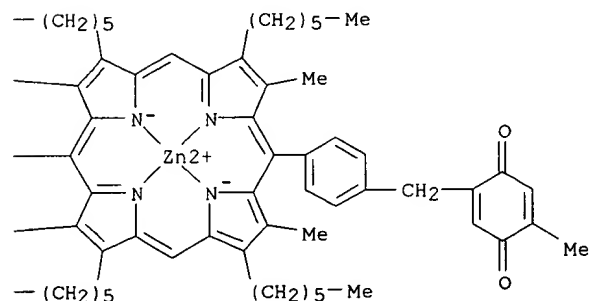
RN 138394-63-5 HCAPLUS

CN Zinc, [.mu.-[2-[[4-[15-[4'-[15-[2,6-bis(phenylmethoxy)phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl][1,1'-biphenyl]-4-yl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl)methyl]-5-methyl-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24']}]di- (9CI) (CA INDEX NAME)

PAGE 1-A



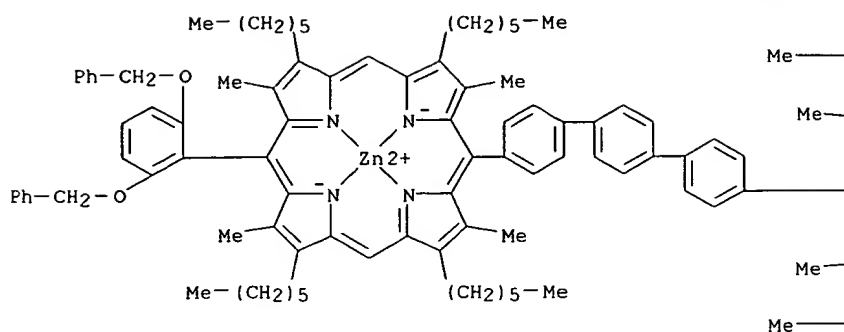
PAGE 1-B



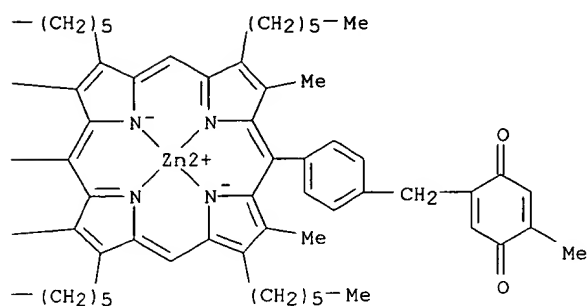
RN 138394-64-6 HCAPLUS

CN Zinc, [.mu.-[2-[[4-[15-[4'-[15-[2,6-bis(phenylmethoxy)phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl][1,1':4',1''-terphenyl]-4-yl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl)methyl]-5-methyl-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24']}]di- (9CI) (CA INDEX NAME)

PAGE 1-A

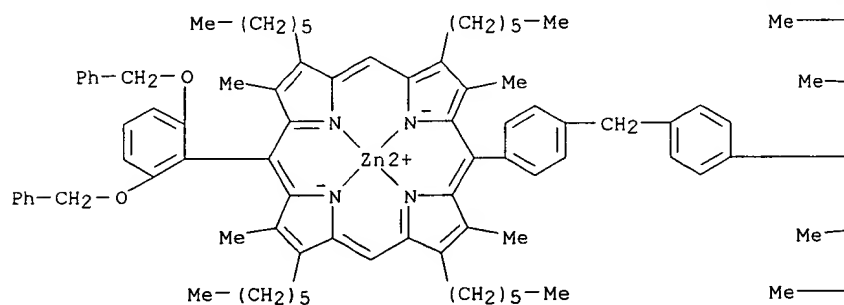


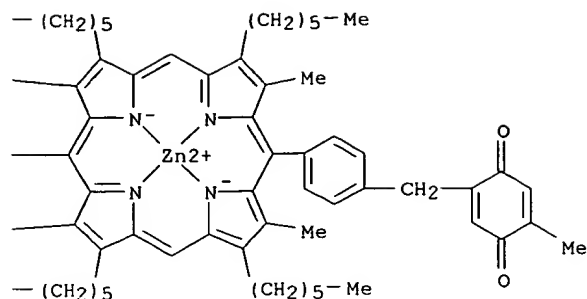
PAGE 1-B



RN 138394-65-7 HCAPLUS
 CN Zinc, [.mu.-[2-[[4-[15-[2,6-bis(phenylmethoxy)phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl)methyl]phenyl]-2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl)methyl]-5-methyl-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24']}]di- (9CI) (CA INDEX NAME)

PAGE 1-A





LI6 ANSWER 14 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1991:558284 HCAPLUS

DN 115:158284

TI Photoinduced electron transfer reactions in quinone-linked zinc porphyrin arrays

AU Osuka, Atsuhiko; Maruyama, Kazuhiro; Mataga, Noboru; Asahi, Tsuyoshi; Yamazaki, Iwao; Tamai, Naoto; Nishimura, Yoshinobu

CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan

SO Chem. Phys. Lett. (1991), 181(5), 413-18

CODEN: CHPLBC; ISSN: 0009-2614

DT Journal

LA English

AB Intramol. photoinduced electron transfer reactions of conformationally restricted quinone-linked zinc porphyrin monomer, dimer, and trimers have been studied by picosecond time-resolved absorption spectroscopy. Both charge sepn. and charge recombination are very rapid in the monomeric model; charge recombination is partly impeded in the dimeric model. In the trimeric models, the singlet excited state of the distal coplanar diporphyrin is efficiently quenched by the attached quinone and long-lived charge-sepd. states are formed most probably by electron transfer from the diporphyrin part to the monomeric porphyrin part, competing with rapid charge recombination.

IT 133369-66-1 133392-57-1 136300-62-4

136324-44-2

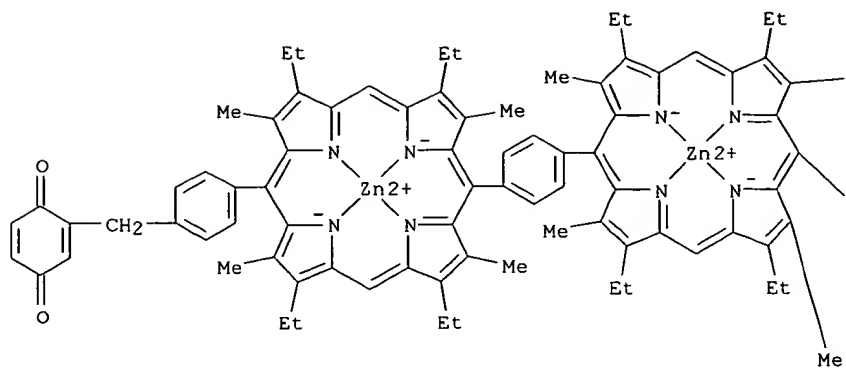
RL: PRP (Properties)

(photoinduced intramol. electron transfer in)

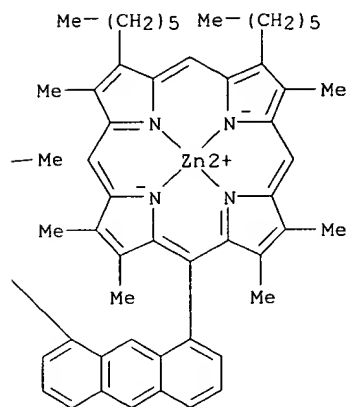
RN 133369-66-1 HCAPLUS

CN Zinc, { .mu.3-[2-[[4-[15-{4-[15-{8-{13,17-dihexyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl)-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(6-)-N21,N22,N23,N24:N21',N22',N23',N24':N21'',N22'',N23'',N24''}]t ri- (9CI) (CA INDEX NAME)

PAGE 1-A

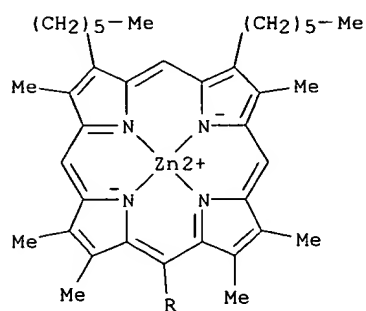
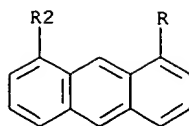


PAGE 1-B

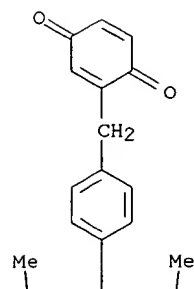


RN 133392-57-1 HCAPLUS
 CN Zinc, [.mu.-[2-([4-[15-[8-(13,17-dihexyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl)-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl)methyl]-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24')]di- (9CI) (CA INDEX NAME)

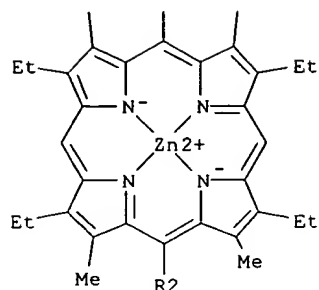
PAGE 1-A



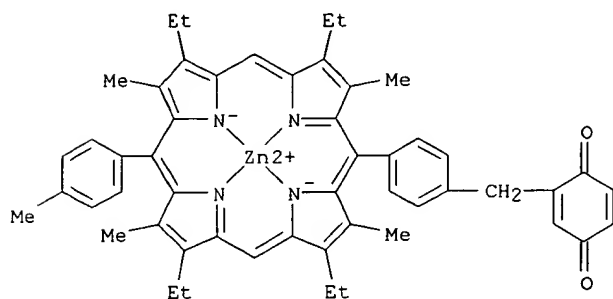
PAGE 2-A



PAGE 3-A

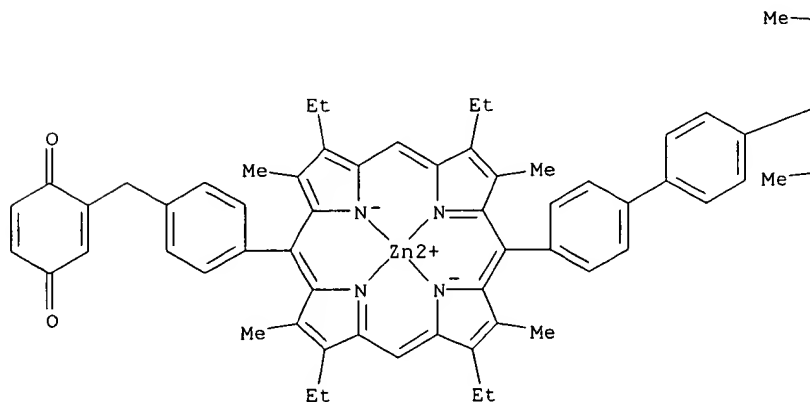


RN 136300-62-4 HCAPLUS
 CN Zinc, [2-[[4-[[2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-15-(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(2-)-N21,N22,N23,N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)



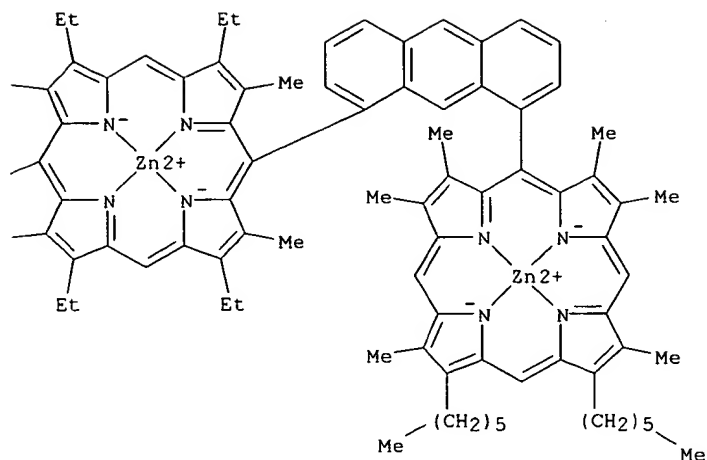
RN 136324-44-2 HCAPLUS
 CN Zinc, [.mu.3-[2-[[4-[15-[8-(13,17-dihexyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl)-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl][1,1'-biphenyl]-4-yl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(6-)-N21,N22,N23,N24:N21',N22',N23',N24':N21'',N22'',N23'',N24'']]tri- (9CI) (CA INDEX NAME)

PAGE 1-A



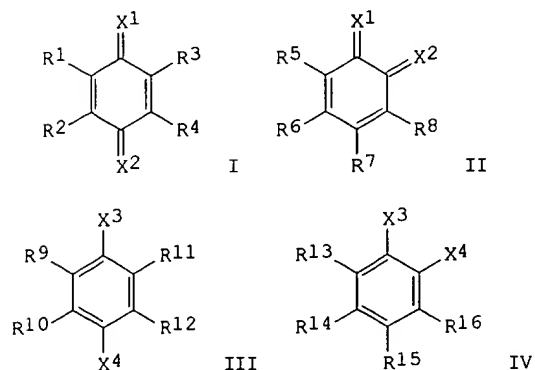
SEARCHED BY SUSAN HANLEY 305-4053

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L16 ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1991:546507 HCAPLUS
 DN 115:146507
 TI Heat-developable photographic material and reduced-stain image formation using same
 IN Hirai, Hiroyuki; Oki, Nobutaka; Ono, Michio
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 35 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02239247	A2	19900921	JP 1989-60527	19890313
	JP 2611832	B2	19970521		
OS	MARPAT 115:146507				
GI					



AB The title heat-developable color photog. material possesses in a coating layer a) photosensitive Ag halide, b) a binder, c) a dye-donor compd. releasing a diffusible dye upon redn. and d) I and/or II and III and(or) IV [X1, X2 = O, NR17; X3, X4 = OH, NHR7 (R17 = aryl, SO2; R1-16 = H,

SEARCHED BY SUSAN HANLEY 305-4053

alkyl, aryl, carbamoyl, sulfamoyl, SO₂, aryl, alkoxy, carbonyl, aryloxy, carbonyl, alkoxy, OH, NH₂, arylamino, aryloxy, sulfonyl = amino, halo, alkylthio, arylthio, SO₃H, CO₂H; R₁ and R₂, R₃ and R₄, R₅ and R₆, R₇ and R₈, R₉ and R₁₀, R₁₁ and R₁₂, R₁₃ and R₁₄, R₁₄ and R₁₅, and R₁₅ and R₁₆ may join to form a ring; dimers and trimers formed through R₁-16 and oligomers and polymers formed via linkage through R₁-16 are also included]. I and(or) II are present at a level 2-100 mol% of III and(or) IV. Image formation is effected by heating subsequent to or during imagewise exposure of the above material.

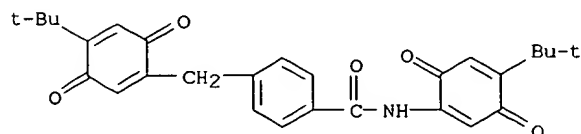
IT 136095-57-3

RL: USES (Uses)

{heat-developable photog. material using}

RN 136095-57-3 HCAPLUS

CN Benamide, N-[4-[(1,1-dimethylethyl)-3,6-dioxo-1,4-cyclohexadien-1-yl]-4-[[4-[(1,1-dimethylethyl)-3,6-dioxo-1,4-cyclohexadien-1-yl]methyl]- (9CI)
(CA INDEX NAME)



L16 ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1991:206863 HCAPLUS

DN 114:206863

TI Synthesis of quinone-linked porphyrin dimer, trimer, and tetramer as models for photosynthetic reaction center

AU Osuka, Atsuhiko; Nagata, Toshi; Maruyama, Kazuhiro

CS Fac. Sci., Kyoto Univ., Kyoto, 606, Japan

SO Chem. Lett. (1991), (3), 481-4

CODEN: CMLTAG; ISSN: 0366-7022

DT Journal

LA English

AB As models for the photosynthetic reaction center, conformationally restricted quinone-linked porphyrin dimer, trimer, and tetramer were synthesized. The Soret bands of these zinc complexes are blue-shifted or split due to the exciton coupling depending on the geometries and compns. The fluorescence intensities of these models are significantly reduced by the attached quinone, indicating the efficient electron transfer to the quinone.

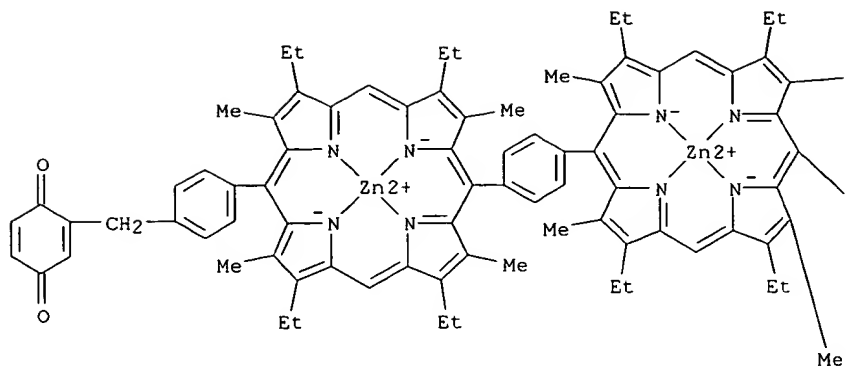
IT 133369-66-1P 133369-67-2P 133392-57-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and UV spectra of, Soret bands in)

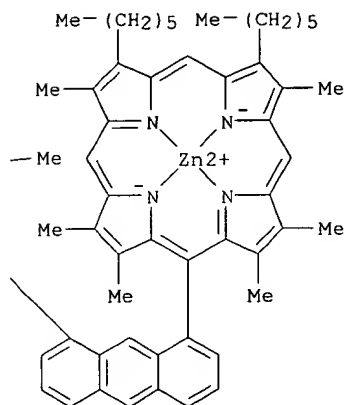
RN 133369-66-1 HCAPLUS

CN Zinc, { .mu.3-[2-[[4-[[15-[[15-[[8-[[13,17-diethyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl]-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(6-)-N21,N22,N23,N24:N21',N22',N23',N24':N21'',N22'',N23'',N24'']]t ri- (9CI) (CA INDEX NAME)

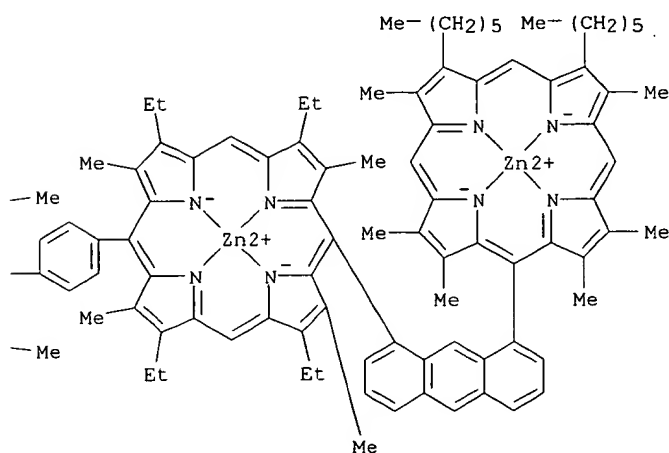
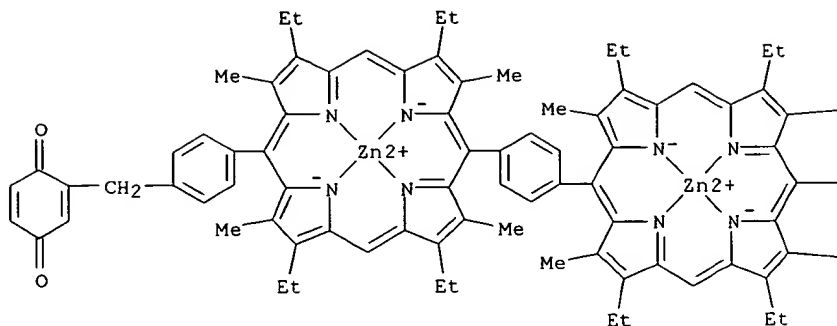
PAGE 1-A



PAGE 1-B

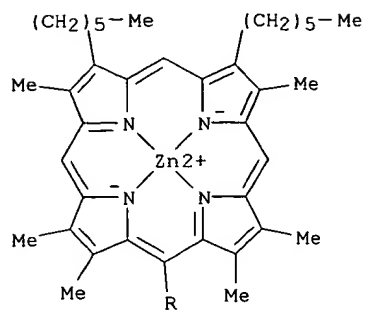
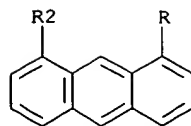


RN 133369-67-2 HCAPLUS
 CN Zinc, [.mu.4-[2-[[4-[15-[4-[15-[4-[15-[8-(13,17-diethyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl)-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(8-)-N21,N22,N23,N24:N21',N22',N23',N24':N21'',N22'',N23'',N24'']]tetra- (9CI) (CA INDEX NAME)

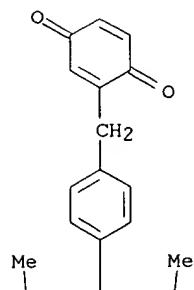


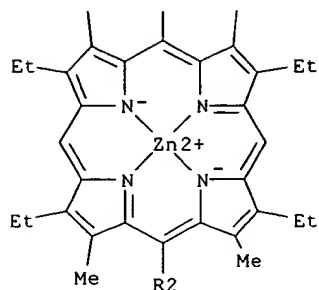
RN 133392-57-1 HCAPLUS
 CN Zinc, [.mu.-[2-[[4-[15-[8-(13,17-dihexyl-2,3,7,8,12,18-hexamethyl-21H,23H-porphin-5-yl)-1-anthracenyl]-2,8,12,18-tetraethyl-3,7,13,17-tetramethyl-21H,23H-porphin-5-yl]phenyl]methyl]-2,5-cyclohexadiene-1,4-dionato(4-)-N21,N22,N23,N24:N21',N22',N23',N24']]]di- (9CI) (CA INDEX NAME)

PAGE 1-A



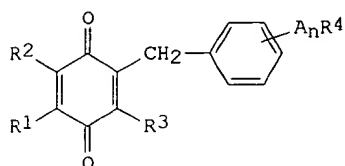
PAGE 2-A



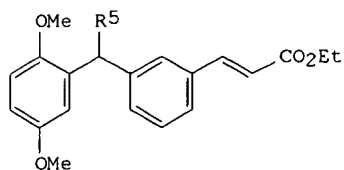


L16 ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1988:186319 HCAPLUS
 DN 108:186319
 TI Preparation of benzylbenzoquinone derivatives for treatment of cerebral disorders
 IN Tatsuoka, Toshio; Suzuki, Kenji; Sato, Fumio; Miyano, Seiji; Sumoto, Kunihiro
 PA Suntory, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62286949	A2	19871212	JP 1986-131139	19860606
GI	JP 2506337	B2	19960612		



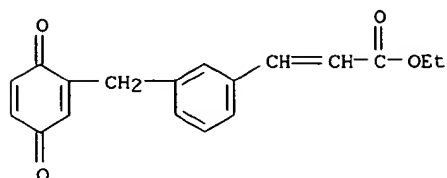
I



II

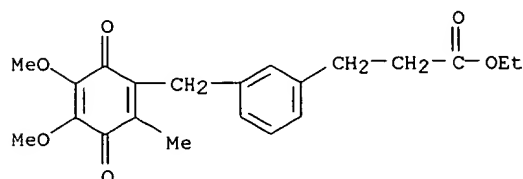
AB Title compds. I [R1, R2, R3 = H, Me, MeO; R4 = H, HOCH2, (esterified or amidated) carboxyl; A = ethylene, vinylene; n = 0, 1] are prep'd. Refluxing II (R5 = OH) (prepn. given) in SOCl2 for 12 h, followed by treatment of the resulting product with Zn at room temp. for 3 h gave 24.5% II (R5 = H), which was treated with picolinic acid and (NH4)2Ce(NO3)6 in MeCN-H2O at room temp. for 30 min to afford 44.0% I (R1 - R3 = H, R4 = CO2Et, A = 3-vinylene) (III). III at .1to req. 12.5 mg/kg i.p. showed antihypoxia activity in mice. A capsule was formulated contg. III 50, lactose 59.5, corn starch 40, and SiO2 0.5 mg.
 IT 114072-67-2P 114072-76-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, for treatment of cerebral disorders)
 RN 114072-67-2 HCAPLUS

CN 2-Propenoic acid, 3-[3-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 114072-76-3 HCAPLUS

CN Benzenepropanoic acid, 3-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1987:496159 HCAPLUS

DN 107:96159

TI Photooxidation of methylbenzenes and methylnaphthalenes sensitized by cyanoanthracenes

AU Albini, Angelo; Spreti, Silvia

CS Dip. Chim. Org., Univ. Pavia, Pavia, 27100, Italy

SO Z. Naturforsch., B: Anorg. Chem., Org. Chem. (1986), 41B(10), 1286-92

CODEN: ZNBAD2; ISSN: 0340-5087

DT Journal

LA English

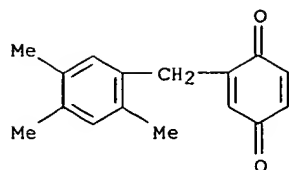
AB 9-Cyanoanthracene, 9,10-dicyanoanthracene, and 3,7,9,10-tetracyanoanthracene photosensitize the oxidn. in acetonitrile of toluene, durene, hexamethylbenzene, 1-methyl-, and 2-methylnaphthalene to the corresponding aldehydes, with low yield of the alcs. and, in the case of hexamethylbenzene, of tetramethylphthalide. In benzene, only hexamethylbenzene reacts through a different pathway involving singlet oxygen. Comparison with fluorescence quenching data and expts. in the presence of good donors, halides or radical traps, as well as the effect of solvents and of oxygen concn., show that the reaction involves electron transfer from the methyl-substituted arom. to the singlet excited state of the sensitizer, followed by proton transfer to CA.bul.- (CA = cyanoanthracene) or O2.bul.- yielding benzyl radicals, which react with oxygen or can be trapped.

IT 109968-53-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 109968-53-8 HCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2,4,5-trimethylphenyl)methyl]- (9CI)
(CA INDEX NAME)



L16 ANSWER 19 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1983:559939 HCAPLUS

DN 99:159939

TI Quinone group-containing azo compounds

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

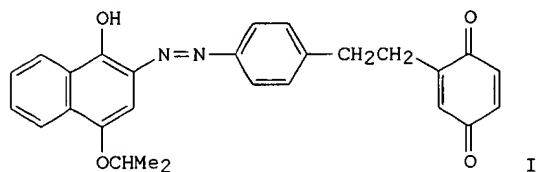
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58065758	A2	19830419	JP 1981-160785	19811008
GI	JP 60046143	B4	19851014		



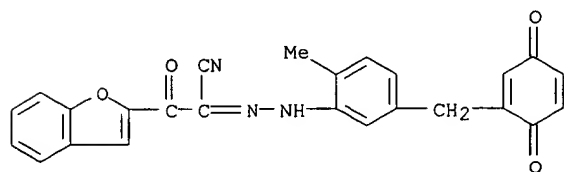
AB Quinone group-contg. azo compds. were prepd. by coupling of quinone group-contg. diazonium salts obtained by treating arom. primary amines contg. hydroquinone group with HNO₂ and an oxidizing agent. Thus, 4-(2,5-dihydroxyphenethyl)aniline-HCl [53554-57-7] was diazotized (HCl-NaNO₂, HNO₂ also acts as an oxidant) and coupled with 4-isopropoxy-1-naphthol [41426-37-3] to give I [53554-47-5].

IT 53554-54-4P 53554-56-6P

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

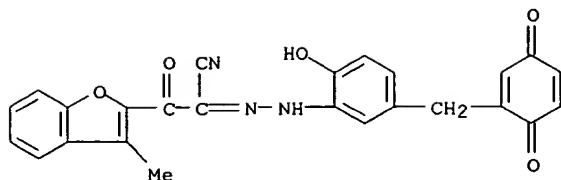
RN 53554-54-4 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-methylphenyl]hydrazono]-.beta.-oxo- (9CI) (CA INDEX NAME)

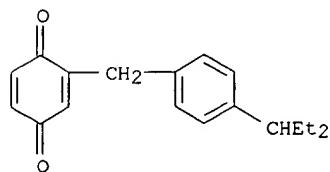


RN 53554-56-6 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-hydroxyphenyl]hydrazono]-3-methyl-.beta.-oxo- (9CI) (CA INDEX NAME)



L16 ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1982:627307 HCAPLUS
 DN 97:227307
 TI The photochemical dissociation of water by means of visible light
 AU Harriman, A.; Porter, G.
 CS Davy Faraday Res. Lab., R. Inst., London, W1X 4BS, UK
 SO Comm. Eur. Communities, [Rep.] EUR (1982), EUR 7682, 147 pp.
 CODEN: CECED9
 DT Report
 LA English
 AB The attempts to construct in vitro a lab. model for a natural photosynthetic process are described. Several simple Mn (II) and Mn (III) chelates quenched the singlet and triplet states of chlorophyll in soln. but the reactions did not produce the radical ions. Replacing the Mn chelates with Mn gluconates (better reductants) and chlorophyll with thionine (better oxidant) offered no improvements. Several H2O sol. Mn porphyrins (MnP) were synthesized and characterized. MnP were stable towards photodegrdn. (only Mn(IV)P showed an appreciable tendency to undergo photoredn.). Metalloporphyrins were photooxidized in presence of excess quinone (Q). In case of Zn and Cu porphyrins reversible electron transfer took place with Q, and in case of Mn(II)P permanent products were formed. Mn(III)P also photoreduced Q to QH2 but the reaction was less efficient than that obsd. for Mn(II)P. The quantum yield was pH dependent and reached an optimum value of .apprx.8%. During this reaction O was evolved (as measured by a membrane electrode) but only for a short time.
 IT **82684-61-5**
 RL: USES (Uses)
 (photolysis of manganese porphyrin and, visible light water photolysis in relation to)
 RN 82684-61-5 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[[4-(1-ethylpropyl)phenyl]methyl]- (9CI)
 (CA INDEX NAME)

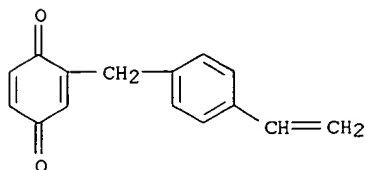


L16 ANSWER 21 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1981:73664 HCAPLUS
 DN 94:73664
 TI Redox resin electrode and its regeneration
 PA Matsushita Electric Industrial Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

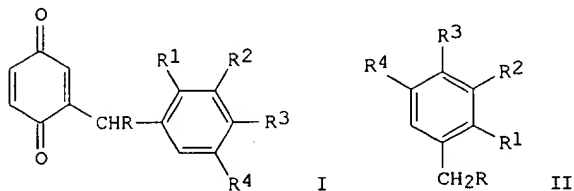
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 55128593	A2	19801004	JP 1979-34680	19790323

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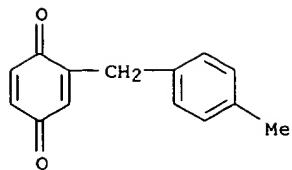
JP 63027973 B4 19880606
 AB A mixt. of powd. insol. redox resin and elec. conductor is used to fill a cylindrical electrode or the former is compacted on a porous elec. conductor plate, and an anodic or a cathodic current is applied to oxidize or reduce the resin. Thus, a 1:1 mixt. of powd. poly[3-(4-vinylphenylmethyl)-1,4-dihydroxybenzene [76341-00-9] resin and C was used to fill a metal cylind. with a porous bottom and water satd. with O was circulated to produce an aq. soln. of H2O2.
 IT **76341-01-0**
 RL: RCT (Reactant)
 (redn. of, electrochem., oxygen redn. to hydrogen peroxide in relation to)
 RN 76341-01-0 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(4-ethenylphenyl)methyl]-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 4021-88-9
 CMF C15 H12 O2



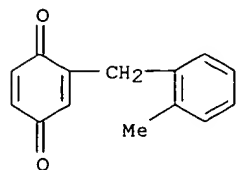
L16 ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1981:15335 HCAPLUS
 DN 94:15335
 TI Electron-transfer processes by peroxydisulfate: homolytic benzylation of quinones by alkylarenes and reactions of aromatic radical cations with aromatics
 AU Citterio, Attilio
 CS Ist. Chim., Politec. Milano, Milan, I-20133, Italy
 SO Gazz. Chim. Ital. (1980), 110(4), 253-8
 CODEN: GCITA9; ISSN: 0016-5603
 DT Journal
 LA English
 GI



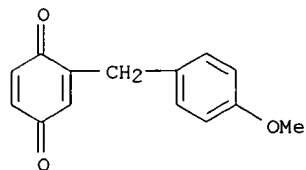
AB Benzylquinones I (R = H, OH, Me, Ac; R1 = H, Me; R2 = MeO, H; R3 = H, Me, MeO, Me2CH; R4 = H, Me) were prepd. in 70-90% yields under two-phase conditions by stirring a soln. of quinone and II with AgNO3 and Na2S2O8 at 60.degree. for 2 h.
 IT **76025-35-9P 76025-36-0P 76025-37-1P 76025-38-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 76025-35-9 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)



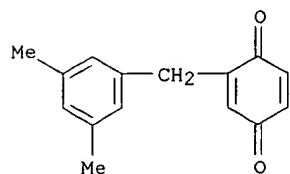
RN 76025-36-0 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2-methylphenyl)methyl]- (9CI) (CA INDEX NAME)



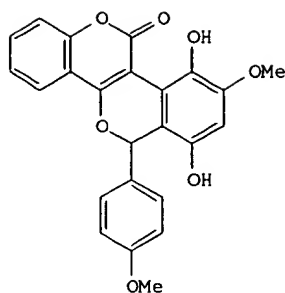
RN 76025-37-1 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)



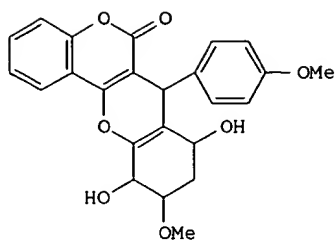
RN 76025-38-2 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(3,5-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)



L16 ANSWER 23 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1980:514350 HCAPLUS
 DN 93:114350
 TI Quinones and quinone methides. VI. Reactions of 2-(arylmethyl)- and 2-(1-arylethyl)-1,4-benzoquinones with 4-hydroxy-2H-1-benzopyran-2-one
 AU Jurd, Leonard; Wong, Rosalind Y.
 CS Sci. Educ. Adm., West. Reg. Res. Cent., Berkeley, CA, 94710, USA
 SO Aust. J. Chem. (1980), 33(1), 137-54
 CODEN: AJCHAS; ISSN: 0004-9425
 DT Journal
 LA English
 GI



III



IV

AB In alc. KOH 2-methoxy-5-[(4-methoxyphenyl)methyl]-1,4-benzoquinone (I) reacted with 4-hydroxy-2H-1-benzopyran-2-one (II) to yield the quinol (III). In pyridine, however, I tautomerized the o-quinone methide which combined with II to yield IV. 2-(1-Arylethyl)-1,4-benzoquinones yielded quinols related to III in both alc. KOH and pyridine solns.; this indicates that quinone methides which might be formed from these quinones are relatively unreactive to nucleophiles.

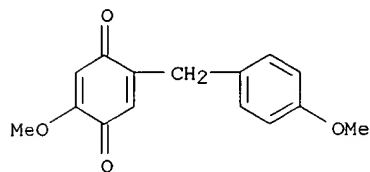
IT 66092-34-0

RL: RCT (Reactant)

(reaction of, with hydroxybenzopyranones)

RN 66092-34-0 HCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-methoxy-5-[(4-methoxyphenyl)methyl]- (9CI)
(CA INDEX NAME)



L16 ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1980:76262 HCAPLUS

DN 92:76262

TI Quinones and quinone methides. IV. Dimerization reactions of 2-phenylmethyl-5-methoxy-1,4-benzoquinones

AU Jurd, L.; Roitman, J. N.; Wong, R. Y.

CS Sci. Educ. Admin., USDA, Berkeley, CA, 94710, USA

SO Tetrahedron (1979), 35(9), 1041-54

CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The benzoquinone I (R = R1 = OMe, R2 = H), prep'd. by condensation of 4-MeOC6H4CH2OH with 2-methoxyhydroquinone and subsequent oxidn. (Ag2O), dimerized to the tetrahydroxanthene II (50-60%) on heating in pyridine (100.degree., 1 h). The benzoquinones I (R = Me, R1 = OMe, R2 = H; R = OMe, R1R2 = OCH2O) underwent analogous dimerizations in pyridine. II underwent mol. rearrangement on treatment with acids and bases and with

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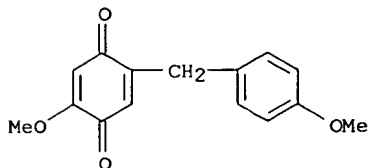
oxidizing and reducing agents. E.g., treatment of II with methanolic NaOAc gave the dihydrooxepin III and the spiro compds. IV and V. The structures of II and III were confirmed by x-ray crystallog. Mechanisms are proposed for the dimerization of I to II and the rearrangements of II to III-V.

IT **66092-34-0P 72590-31-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and dimerization of)

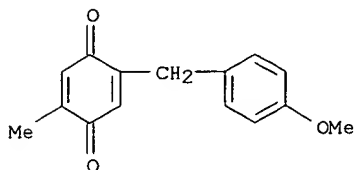
RN 66092-34-0 HCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-methoxy-5-[(4-methoxyphenyl)methyl]- (9CI)
(CA INDEX NAME)



RN 72590-31-9 HCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(4-methoxyphenyl)methyl]-5-methyl- (9CI)
(CA INDEX NAME)



L16 ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1979:455928 HCAPLUS

DN 91:55928

TI Electron-transfer processes: oxidation of naphthalene and p-cymene by peroxydisulfate

AU Giordano, Claudio; Belli, Aldo; Citterio, Attilio; Minisci, Francesco

CS Ist. Donegani, Novara, Italy

SO J. Org. Chem. (1979), 44(13), 2314-15

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

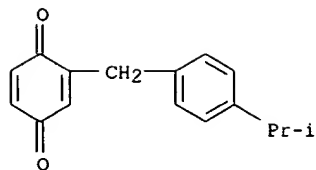
AB Direct arom. oxidative acetoxylation (AcOH/KOAc) of naphthalene occurs in the presence of S2O82- and Cu(OAc)2. p-Cymene (I) gives p-Me2CHC6H4CH2OAc under the same conditions. The oxidn. of I with S2O82- in the presence of p-benzoquinone gives the 2-(p-isopropylbenzyl)benzoquinone in 40% yield; moreover p-MeCHC6H4R (R = CH2OH, CHO) were isolated in addnl. 30% yield. These results provide further evidence concerning the formation of arom. radical cations in the interaction of the sulfate radical anion, SO4-.bul., with aroms.

IT **69897-58-1P**

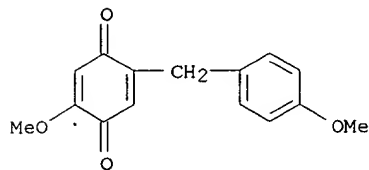
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 69897-58-1 HCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[[4-(1-methylethyl)phenyl]methyl]- (9CI)
(CA INDEX NAME)

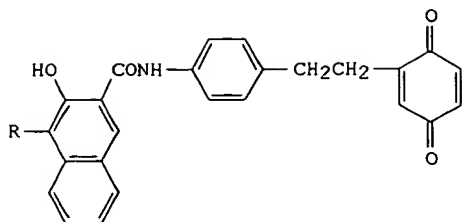


L16 ANSWER 26 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1978:135864 HCAPLUS
 DN 88:135864
 TI Quinones and quinone methides. III. A novel side-chain amination reaction of 2-(1-phenylethyl)-1,4-benzoquinones
 AU Jurd, Leonard
 CS WRRRC, ARS, Berkeley, Calif., USA
 SO Aust. J. Chem. (1978), 31(2), 347-52
 CODEN: AJCHAS; ISSN: 0004-9425
 DT Journal
 LA English
 AB 2-Benzyl-5-methoxy-1,4-benzoquinones react with morpholine to yield 2-phenylmorpholinomethylhydroquinones. However, 5-methoxy-2-(1-phenylethyl)-1,4-benzoquinones undergo a novel amination reaction at the .beta.-C atom of the alkyl group with the formation of 2-morpholino-3-phenylbenzofurans.
 IT **66092-34-0**
 RL: RCT (Reactant)
 (reaction of, with morpholine)
 RN 66092-34-0 HCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-methoxy-5-[(4-methoxyphenyl)methyl]- (9CI)
 (CA INDEX NAME)



L16 ANSWER 27 OF 29 HCAPLUS COPYRIGHT 2000 ACS
 AN 1976:152204 HCAPLUS
 DN 84:152204
 TI Azo dyes containing quinone groups
 IN Maekawa, Yukio
 PA Fuji Photo Film Co., Ltd., Japan
 SO Japan. Kokai, 17 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50161525	A2	19751227	JP 1974-70668	19740620
	JP 58028297	B4	19830615		
GI					



I

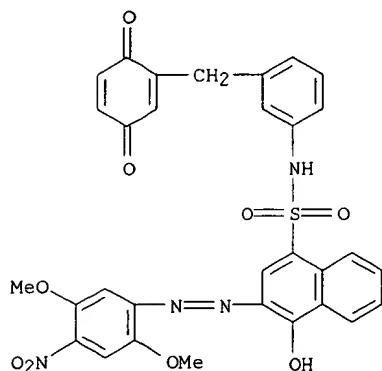
AB Azo dyes contg. quinone groups, useful as intermediates in the prepn. of color formers for diffusion-transfer color photog. film, are prepd. by reacting diazonium salts with coupling components contg. quinone groups. For example, 3,2-HOC10H6COC1 [1734-00-5] was condensed with 2,5-(HO)2C6H3CH2CH2C6H4NH2.HBr-4 [5803-20-3] and the amide product [58862-33-2] was oxidized by MnO2 in DMF-ClCH2CH2Cl to give I (R = H) [58862-32-1]. This was coupled with diazotized 4-MeC6H4NH2 [106-49-0] to give I (R = 4-MeC6H4N:N) [58862-34-3]. Another monoazo compd. and a disazo compd., each contg. a quinone group, were similarly prepd.

IT **58862-27-4P**

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 58862-27-4 HCAPLUS

CN 1-Naphthalenesulfonamide, 3-[(2,5-dimethoxy-4-nitrophenyl)azo]-N-[3-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]phenyl]-4-hydroxy- (9CI) (CA INDEX NAME)



L16 ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1975:126602 HCAPLUS

DN 82:126602

TI Azo dyes

IN Fujita, Shinsaku

PA Fuji Photo Film Co., Ltd., Japan

SO Japan. Kokai, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 49118723	A2	19741113	JP 1973-31592	19730319
	DE 2413223	A1	19740926	DE 1974-2413223	19740319
	GB 1426689	A	19760303	GB 1974-12187	19740319
PRAI	JP 1973-31592		19730319		

GI For diagram(s), see printed CA Issue.

AB Arom. primary amine with hydroquinone group was treated with nitrous acid

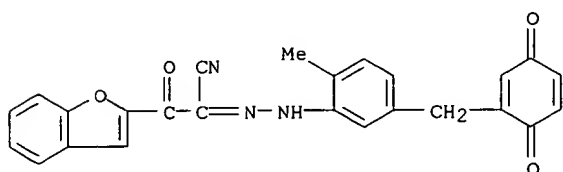
SEARCHED BY SUSAN HANLEY 305-4053

[7782-77-6] and oxidant to give diazonium salt contg. quinone group, which was then treated with coupler to give azo dyes contg. quinone group. Excess HNO₂ acted as both diazotizing and oxidizing agents; and oxidants used in addn. to HNO₂ were nitric acid [7697-37-2], bromic acid [7789-31-3], and Caro's acid [7722-86-3]. For example, 0.05 mole 4-(2,5-dihydroxyphenethyl)aniline-HCl [53554-57-7] in 2.5% HCl was treated with 0.16 mole NaNO₂ at 0.degree. for 1-2 hr, treated with sulfamic acid and then NaOAc, and coupled with 4-isopropoxy-1-naphthol [41426-37-3] to give I (R = Me₂CH) [53554-47-5]; also prepd. were, e.g., I (R = CH₂CH₂OEt) [53554-48-6], II (R = R₁ = H) [53554-53-3], II (R = Me, R₁ = H) [53554-54-4], and II (R = HO, R₁ = Me) [53554-56-6].

IT 53554-54-4 53554-56-6
 RL: MSC (Miscellaneous)
 (dyes, photog.)

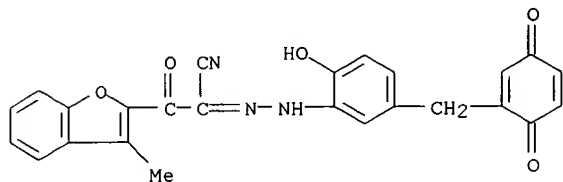
RN 53554-54-4 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-methylphenyl]hydrazono]-.beta.-oxo- (9CI) (CA INDEX NAME)



RN 53554-56-6 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-hydroxyphenyl]hydrazono]-3-methyl-.beta.-oxo- (9CI) (CA INDEX NAME)



L16 ANSWER 29 OF 29 HCAPLUS COPYRIGHT 2000 ACS

AN 1974:571365 HCAPLUS

DN 81:171365

TI Diazonium salts for forming azo dyes

IN Fujita, Shinsaku

PA Fuji Photo Film Co., Ltd.

SO Ger. Offen., 31 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2413223	A1	19740926	DE 1974-2413223	19740319
	JP 49118723	A2	19741113	JP 1973-31592	19730319
PRAI	JP 1973-31592		19730319		

AB Azo compds. (I, R = substituted naphthyl, phenyl, pyrazolyl, benzothiazolyl, (benzoxazolylcarbonyl)cyanomethyl; R₁ = H, Me, OH; n = 1,2) or their tautomers useful as intermediates for photog. purposes, were prepd. by oxidn. of the [(aminophenyl)alkyl]hydroquinone deriv. during diazotization and coupling with RH.

IT 53554-54-4P 53554-56-6P

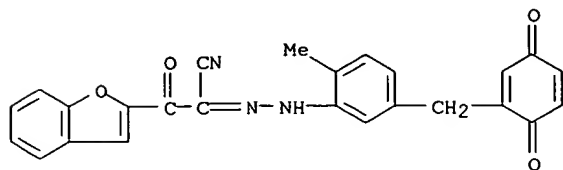
RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of)

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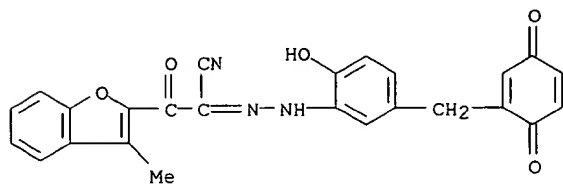
RN 53554-54-4 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-methylphenyl]hydrazono]-.beta.-oxo- (9CI) (CA INDEX NAME)



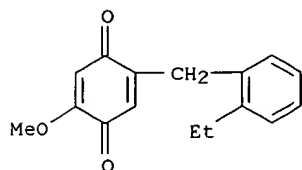
RN 53554-56-6 HCAPLUS

CN 2-Benzofuranpropanenitrile, .alpha.-[[5-[(3,6-dioxo-1,4-cyclohexadien-1-yl)methyl]-2-hydroxyphenyl]hydrazono]-3-methyl-.beta.-oxo- (9CI) (CA INDEX NAME)

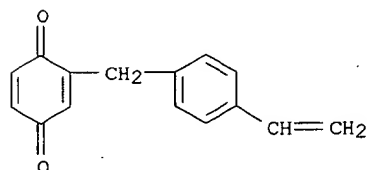


=> D L17 ALL HITSTR 1-4

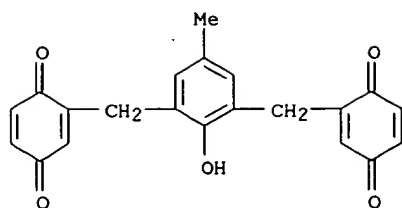
L17 ANSWER 1 OF 4 CAOLD COPYRIGHT 2000 ACS
 AN CA64:3398e CAOLD
 TI neoflavanoid group of natural products - (I) dalbergiones, a class of quinones
 AU Eyton, W. B.; Ollis, W. D.; Sutherland, I. O.; Gottlieb, O. R.; Magalhaes, M. T.; Jackman, L. M.
 IT 14753-79-8 20058-43-9 28396-75-0 29644-99-3 **93434-40-3**
 94538-07-5 94968-40-8 95280-47-0 95941-64-3
 IT **93434-40-3**
 RN 93434-40-3 CAOLD
 CN p-Benzoquinone, 2-(o-ethylbenzyl)-5-methoxy- (7CI) (CA INDEX NAME)



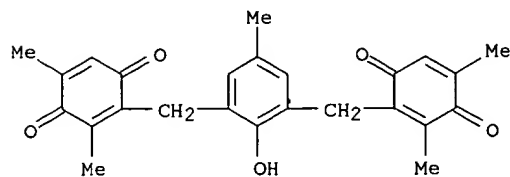
L17 ANSWER 2 OF 4 CAOLD COPYRIGHT 2000 ACS
 AN CA63:3120g CAOLD
 TI macroreticular redox polymers - (I) hydroquinone-quinone redox polymers
 AU Kun, Kenneth A.
 IT 2561-93-5 **4021-88-9** 4021-89-0 4021-90-3
 IT **4021-88-9**
 RN 4021-88-9 CAOLD
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(4-ethenylphenyl)methyl]- (9CI) (CA INDEX NAME)



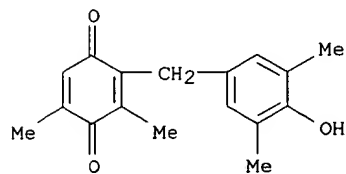
L17 ANSWER 3 OF 4 CAOLD COPYRIGHT 2000 ACS
 AN CA57:3343c CAOLD
 TI synthesis and oxidn.-redn. behavior of monodisperse hydroquinone-phenol-HCHO condensates
 AU Manecke, Georg; Foerster, H. J.
 IT 700-13-0 1706-73-6 17228-80-7 20738-85-6 89640-21-1 91719-33-4
 91903-05-8 92106-56-4 92165-67-8 93018-48-5 95429-94-0
95703-35-8 95814-20-3 95815-81-9 96579-37-2 **96707-83-4**
 97154-94-4 97434-16-7 97615-45-7 98270-74-7
 IT **95703-35-8** **96707-83-4**
 RN 95703-35-8 CAOLD
 CN p-Benzoquinone, [(2-hydroxy-5-methyl-m-phenylene)dimethylene]bis- (7CI) (CA INDEX NAME)



RN 96707-83-4 CAOLD
 CN p-Benzoquinone, 2,2'-[(2-hydroxy-5-methyl-m-phenylene)dimethylene]bis[3,5-dimethyl- (7CI) (CA INDEX NAME)



L17 ANSWER 4 OF 4 CAOLD COPYRIGHT 2000 ACS
 AN CA55:2165h CAOLD
 TI lesser role of quinone methides in curing and discoloring reaction of phenolic resins
 AU Nakamura, Yoshiro
 IT 809-73-4 4397-13-1 4397-14-2 4752-75-4 6538-35-8 14010-03-8
 101594-98-3 115605-58-8 115606-15-0 116151-62-3 116152-65-9
 116438-19-8 116438-39-2
 IT 101594-98-3
 RN 101594-98-3 CAOLD
 CN p-Benzoquinone, 2-(4-hydroxy-3,5-dimethylbenzyl)-3,5-dimethyl- (6CI) (CA INDEX NAME)



=> D L21 1

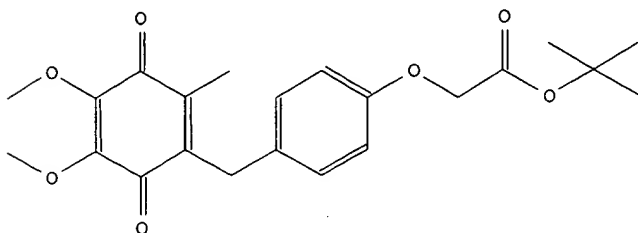
L21 ANSWER 1 OF 31 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 7726283 Beilstein
 Molecular Formula (MF): C22 H26 O7
 Synonym (SY): tert-butyl 4-(5,6-dimethoxy-3-methyl-1,4-benzoquinon-2-ylmethyl)phenoxyacetate
 Autonom Name (AUN): <4-(4,5-dimethoxy-2-methyl-3,6-dioxo-cyclohexa-1,4-dienylmethyl)-phenoxy>-acetic acid tert-butyl ester
 Beilstein Reference (SO): 6-08
 Formula Weight (FW): 402.44
 Lawson Number (LN): 10094; 1771; 318; 289

Ring System Data:

Number of Rings (CNR): 2
 Ring Systems (CNRS): 2
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 7

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-3.1	C6	1
6.1.0-0.0-2.3	C6	1



Preparation:

PRE

Start: BRN=7724250 tert-butyl 4-(2-hydroxy-3,4-dimethoxy-6-methylbenzyl)phenoxyacetate

Reag: salcomine, O2

Time: 12 hour(s)

Yield: 67.50 %

Solv: dimethylformamide

Ambient Temperature

Reference(s):

1. Suzuki, Kenji; Tatsuoka, Toshio; Ishihara, Takafumi; Ogino, Ryoko; Miyazaki, Tomoko; et al., Chem.Pharm.Bull., 45 <1997> 4, 668-674, LA: EN, CODEN: CPBTAL

=> D L24 1

L24 ANSWER 1 OF 29 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 7551267 Beilstein
 Molecular Formula (MF): C24 H30 N2 O3
 Autonom Name (AUN): 2,3,5-trimethyl-6-(3-(4-methyl-piperazin-1-yl)-3-oxo-propyl)-benzyl)-<1,4>benzoquinone
 Beilstein Reference (SO): 6-23

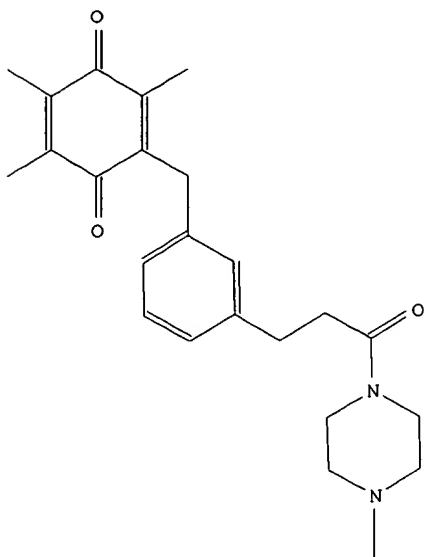
SEARCHED BY SUSAN HANLEY 305-4053

Formula Weight (FW): 394.51
 Lawson Number (LN): 28000; 13148; 2817

Ring System Data:

Number of Rings (CNR): 3
 Ring Systems (CNRS): 3
 Diff. Ring Systems (CNDRS): 3
 Ring Heteros (CNRH): 2
 Acyclic Heteros (CNAH): 3

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	1
6.1.0-0.0-3.1	C6	1
6.1.0-2.2-0.0	C4N2	1



=> D PRE

L24 ANSWER 1 OF 29 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Preparation:

PRE

Start: BRN=7543248 3-<3-<(3,5,6-trimethyl-1,4-benzoquinon-2-yl)methyl>phenyl>propionic acid, BRN=102724 1-methyl-piperazine

Reag: DMAP

Yield: 55.00 %

Solv: CH₂Cl₂

Reference(s):

1. Suzuki, Kenji; Tatsuoka, Toshio; Murakami, Tomiko; Ishihara, Takafumi; Aisaka, Kazuo, Chem.Pharm.Bull., 44 <1996> 1, 139-144, LA: EN, CODEN: CPBTAL

=> D L28 1

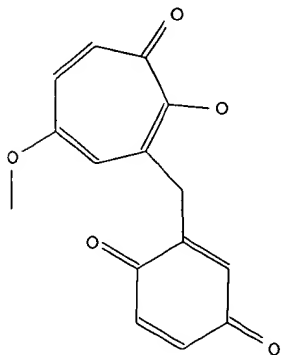
L28 ANSWER 1 OF 20 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 6975857 Beilstein
 Molecular Formula (MF): C₁₅ H₁₂ O₅
 Autonom Name (AUN): 2-(2-hydroxy-6-methoxy-3-oxo-cyclohepta-1,4,6-trienylmethyl)-<1,4>benzoquinone
 Beilstein Reference (SO): 6-08
 Formula Weight (FW): 272.26
 Lawson Number (LN): 10113; 289

Ring System Data:

Number of Rings (CNR): 2
 Ring Systems (CNRS): 2
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 5

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
7.1.0-0.0-3.2	C7	1
6.1.0-0.0-2.3	C6	1



Preparation:

PRE

Start: BRN=6977192 3-(2,5-dihydroxybenzyl)-5-methoxytropolone
 Reag: DDQ
 Time: 2 hour(s)
 Yield: 56.00 %
 Solv: acetone
 Ambient Temperature
 Reference(s):

1. Mori, Akira; Goto, Yasutomo; Takeshita, Hitoshi, Bull.Chem.Soc.Jpn., 60 <1987> 7, 2497-2502, LA: EN, CODEN: BCSJA8

=> D L32

L32 ANSWER 1 OF 19 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 6504706 Beilstein
 Molecular Formula (MF): C₁₅ H₁₄ O₂
 Autonom Name (AUN): 2-(3,5-dimethyl-benzyl)-<1,4>benzoquinone
 Beilstein Reference (SO): 6-07
 Formula Weight (FW): 226.27
 Lawson Number (LN): 8013

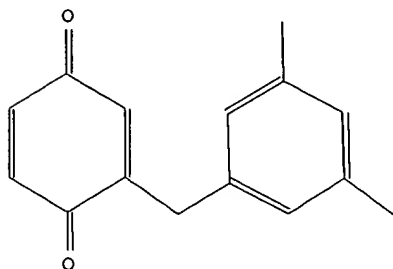
Ring System Data:

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Page 3

Number of Rings (CNR): 2
 Ring Systems (CNRS): 2
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 2

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	1
6.1.0-0.0-3.1	C6	1



Preparation:
 PRE

Start: BRN=773967 <1,4>benzoquinone, BRN=906806 1,3,5-trimethyl-benzene
 Reag: AgNO3, H2SO4, Na2S2O8
 Time: 0.5 hour(s)
 Yield: 70.00 %
 Solv: H2O
 Temp: 60.0 Cel
 ByProd: BRN=2038840 3,5-dimethyl-benzaldehyde \1 percent of Input
 Reference(s):
 1. Citterio, Attilio, Gazz.Chim.Ital., 110 <1980> 4, 253-258, LA: EN,
 CODEN: GCITA9

=> D L35

L35 ANSWER 1 OF 16 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

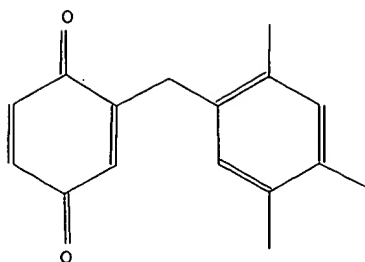
Beilstein Reg. No. (BRN): 6399304 Beilstein
 Molecular Formula (MF): C16 H16 O2
 Synonym (SY): 2-(2,4,5-trimethylbenzyl)-p-benzoquinone
 Autonom Name (AUN): 2-(2,4,5-trimethyl-benzyl)-<1,4>benzoquinone
 Beilstein Reference (SO): 6-07
 Formula Weight (FW): 240.30
 Lawson Number (LN): 8015

Ring System Data:

Number of Rings (CNR): 2
 Ring Systems (CNRS): 2
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 2

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-3.1	C6	1
6.1.0-0.0-2.3	C6	1

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Preparation:

PRE

Start: BRN=1903393 1,2,4,5-tetramethyl-benzene, BRN=773967
 <1,4>benzoquinone

Reag: 9,10-dicyanoanthracene

Time: 6 hour(s)

Yield: 15.00 %

Solv: acetonitrile

Irradiation

Reference(s):

1. Albini, Angelo; Spreti, Silvia, Z.Naturforsch.B Anorg.Chem.Org.Chem.,
 41 <1986> 10, 1286-1292, LA: EN, CODEN: ZNBAD2

=> D L38

L38 ANSWER 1 OF 15 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 4901834 Beilstein

Molecular Formula (MF): C69 H86 N4 O2

Synonym (SY): 5-(4-methylphenyl)-15-(4-methylcyclohexadienyl)methyl>phenyl>-2,8,12,18-tetrahexyl-3,7,13,17-tetramethylporphine

Autonom Name (AUN): 2-methyl-5-(2,8,12,18-tetrahexyl-3,7,13,17-tetramethyl-15-p-tolyl-porphyrin-5-yl)-benzyl>-<1,4>benzoquinone

Beilstein Reference (SO): 6-26

General Comments (NTE): Stereo compound

CAS Reg. No. (RN): 138537-03-8

Beilstein Pref. RN (BPR): 138537-03-8

Formula Weight (FW): 1003.46

Lawson Number (LN): 30567

Ring System Data:

Number of Rings (CNR): 8

Ring Systems (CNRS): 4

Diff. Ring Systems (CNDRS): 3

Ring Heteros (CNRH): 4

Acyclic Heteros (CNAH): 2

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
24.5.32-4.1-11.2	C20N4	1
6.1.0-0.0-3.1	C6	2
6.1.0-0.0-2.3	C6	1

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Atom/Bond Notes:

1. CIP Descriptor: Z

Preparation:

PRE

Start: BRN=4901876 C69H88N4O2

Reag: PbO2

Solv: CH2Cl2

Reference(s):

1. Nagata, Toshi, Bull.Chem.Soc.Jpn., 64 <1991> 10, 3005-3016, LA: EN,
CODEN: BCSJA8

=> D L41

L41 ANSWER 1 OF 7 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 3990587 Beilstein

Molecular Formula (MF): C15 H12 O4

Lin. Struct. Formula (LSF): C15H12O4(1-)

Beilstein Reference (SO): 5-08

Formula Weight (FW): 256.26

Lawson Number (LN): 9855

Ring System Data:

Number of Rings (CNR): 2

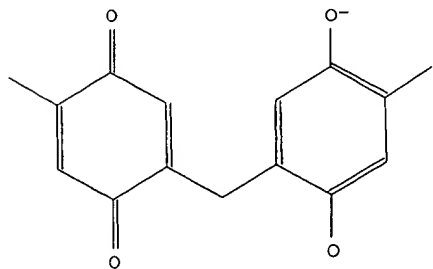
Ring Systems (CNRS): 2

Diff. Ring Systems (CNDRS): 2

Ring Heteros (CNRH): 0

Acyclic Heteros (CNAH): 4

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	1
6.1.0-0.0-3.1	C6	1



Preparation:

PRE

Reference(s):

1. Lindsey et al., J.Chem.Soc., <1962>, 4558,4564, CODEN: JCSOA9

=> D L44

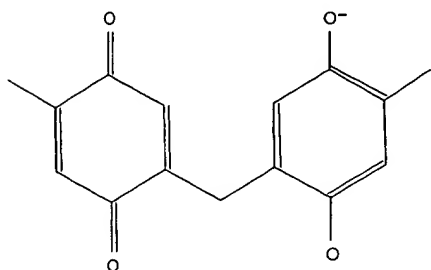
L44 ANSWER 1 OF 5 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 3990587 Beilstein
 Molecular Formula (MF): C15 H12 O4
 Lin. Struct. Formula (LSF): C15H12O4(1-)
 Beilstein Reference (SO): 5-08
 Formula Weight (FW): 256.26
 Lawson Number (LN): 9855

Ring System Data:

Number of Rings (CNR): 2
 Ring Systems (CNRS): 2
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 4

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	1
6.1.0-0.0-3.1	C6	1



Preparation:

PRE

Reference(s):

1. Lindsey et al., J.Chem.Soc., <1962>, 4558,4564, CODEN: JCSOA9

=> D L45 2

L45 ANSWER 2 OF 5 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 3501679 Beilstein
 Molecular Formula (MF): C27 H28 O5
 Chemical Name (CN): <1-benzoyloxy-2,3,5,6-tetramethyl-4-oxo-cyclohexa-2,5-dienylmethyl>-trimethyl-<1,4>benzoquinone
 <1-Benzoyloxy-2,3,5,6-tetramethyl-4-oxo-cyclohexa-2,5-dienylmethyl>-trimethyl-<1,4>benzochinon
 Synonym (SY): 1-Benzoyloxy-4.3'.6'-trioxo-2.3.5.6.2'.4'.5'-heptamethyl-diphenylmethan-tetrahydrid-(1.4.3'.6')
 Autonom Name (AUN): benzoic acid 2,3,5,6-tetramethyl-4-oxo-1-(2,4,5-trimethyl-3,6-dioxo-cyclohexa-1,4-dienylmethyl)-cyclohexa-2,5-dienyl ester
 Beilstein Reference (SO): 0-09-00-00160
 Formula Weight (FW): 432.52
 Lawson Number (LN): 10581; 9857

Ring System Data:

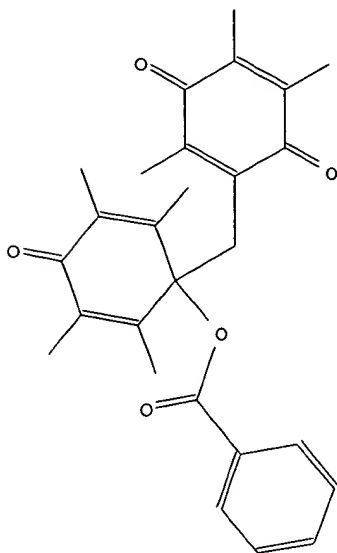
Number of Rings (CNR): 3
 Ring Systems (CNRS): 3
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0

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Page 7

Acyclic Heteros (CNAH): 5

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	2
6.1.0-0.0-3.1	C6	1



Preparation:

PRE

Start: BRN=471389 benzoyl chloride, diduroquinone

Reag: methanolic potash

Reference(s):

1. Ruegheimer; Hankel, Chem.Ber., 29 <1896>, 2183, CODEN: CHBEAM

Note(s):

2. Handbook Data

=> D L49 ALL PRE/FA 1

'PRE' MUST END IN '/Q', '/A', '/L', '/S' OR '/B'

The saved name for a query (or structure or screen set) must end with '/Q'. The saved name for an answer set must end with '/A'. The saved name for an L# list must end with '/L'. SDI request names must end with '/S'. To see a list of all saved query, answer set,, and L# list names for this loginid, enter "DISPLAY SAVED" at an arrow prompt (=>). Enter "DISPLAY SAVED/S" to see a list of SDI request names. Enter "DISPLAY SAVED/B" to see a list of BATCH search requests.

=> D L50

L50 ANSWER 1 OF 4 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 3990587 Beilstein

Molecular Formula (MF): C15 H12 O4

Lin. Struct. Formula (LSF): C15H12O4(1-)

Beilstein Reference (SO): 5-08

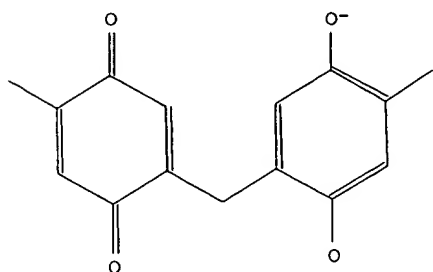
SEARCHED BY SUSAN HANLEY 305-4053

Formula Weight (FW): 256.26
Lawson Number (LN): 9855

Ring System Data:

Number of Rings (CNR): 2
Ring Systems (CNRS): 2
Diff. Ring Systems (CNDRS): 2
Ring Heteros (CNRH): 0
Acyclic Heteros (CNAH): 4

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	1
6.1.0-0.0-3.1	C6	1



Preparation:

PRE

Reference(s):

1. Lindsey et al., J.Chem.Soc., <1962>, 4558,4564, CODEN: JCSOA9

=> D L52

L52 ANSWER 1 OF 3 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

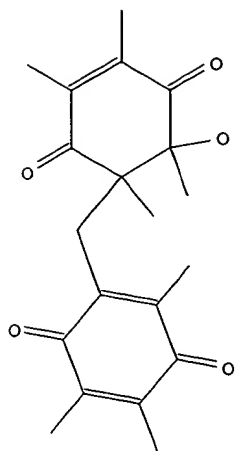
Beilstein Reg. No. (BRN): 3465517 Beilstein
Molecular Formula (MF): C20 H24 O5
Chemical Name (CN): <6-hydroxy-1,3,4,6-tetramethyl-2,5-dioxo-cyclohex-3-enylmethyl>-trimethyl-<1,4>benzoquinone
<6-Hydroxy-1,3,4,6-tetramethyl-2,5-dioxo-cyclohex-3-enylmethyl>-trimethyl-<1,4>benzochinon
Autonom Name (AUN): 2-(6-hydroxy-1,3,4,6-tetramethyl-2,5-dioxo-cyclohex-3-enylmethyl)-3,5,6-trimethyl-<1,4>benzoquinone
Beilstein Reference (SO): 3-08-00-04094
Formula Weight (FW): 344.41
Lawson Number (LN): 10098

Ring System Data:

Number of Rings (CNR): 2
Ring Systems (CNRS): 2
Diff. Ring Systems (CNDRS): 2
Ring Heteros (CNRH): 0
Acyclic Heteros (CNAH): 5

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-1.2	C6	1
6.1.0-0.0-2.3	C6	1

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Preparation:

PRE

Start: diduroquinone

Reag: FeCl3, ethanol

Reference(s):

1. Smith; Tess; Ulliyot, J.Amer.Chem.Soc., 66<1944>1320,1322, CODEN: JACSAT

Note(s):

2. Handbook Data

=> D 2

L52 ANSWER 2 OF 3 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 2120022 Beilstein

Molecular Formula (MF): C14 H10 O4

Synonym (SY): 2-(1,4-Benzochinon-2-ylmethyl)-5-methyl-1,4-benzochinon

Beilstein Reference (SO): 5-07

CAS Reg. No. (RN): 54771-65-2

Beilstein Pref. RN (BPR): 54771-65-2

Formula Weight (FW): 242.23

Lawson Number (LN): 8429

Ring System Data:

Number of Rings (CNR): 2

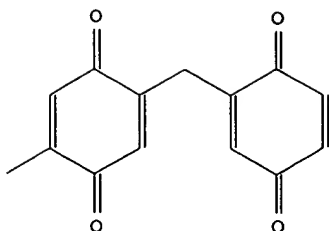
Ring Systems (CNRS): 2

Diff. Ring Systems (CNDRS): 1

Ring Heteros (CNRH): 0

Acyclic Heteros (CNAH): 4

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	2



Preparation:

PRE

Reference(s) :

1. Stork; Manecke, *Makromol.Chem.*, 176 <1975>, 97,110, CODEN: MACEAK

=> D 3

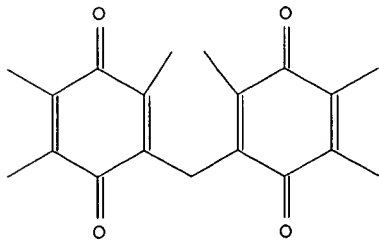
L52 ANSWER 3 OF 3 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN):	2008976	Beilstein
Molecular Formula (MF):	C19 H20 O4	
Chemical Name (CN):	3,5,6,3',5',6'-hexamethyl-2,2'-methanediyl-di- <1,4>benzoquinone 3,5,6,3',5',6'-Hexamethyl-2,2'-methandiyl-di- <1,4>benzochinon	
Beilstein Reference (SO):	4-07-00-02874; 5-07	
CAS Reg. No. (RN):	17228-80-7	
Beilstein Pref. RN (BPR):	17228-80-7	
Formula Weight (FW):	312.36	
Lawson Number (LN):	8431	

Ring System Data:

Number of Rings (CNR):	2
Ring Systems (CNRS):	2
Diff. Ring Systems (CNDRS):	1
Ring Heteros (CNRH):	0
Acyclic Heteros (CNAH):	4

Beilstein Ring Index (BRIX)	Ring System Formula (RF)	BRIX Count
6.1.0-0.0-2.3	C6	2



Preparation:

PRE

Start: BRN=2011494 bis-<2,5-dihydroxy-3,4,6-trimethyl-phenyl>-methane

Reaq: FeCl_3

Reference(s):

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1. Smith et al., J.Amer.Chem.Soc., 72 <1950> 3651, CODEN: JACSAT
- Note(s):
2. Handbook Data

PRE

Reference(s):

1. Hunt et al., J.Chem.Soc.B, <1967>, 791,793,795, CODEN: JCSPAC